

May 1957

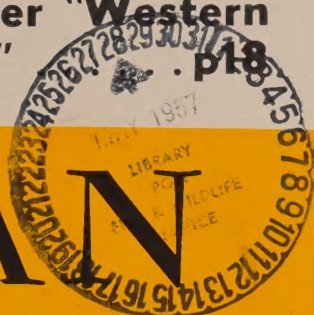
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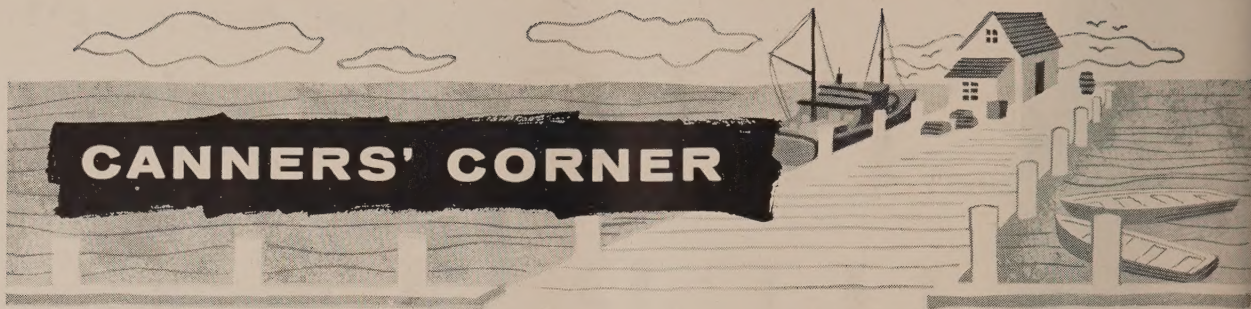
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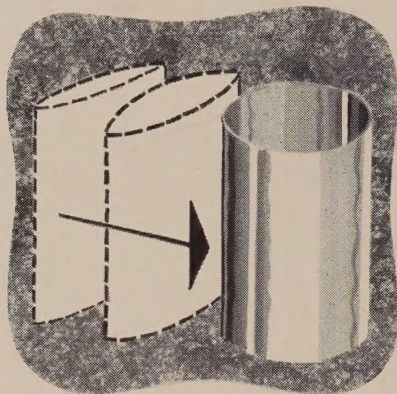
PACIFIC FISHERMAN



OFF WITH THE OLD; ON WITH THE NEW—Foamed plastic floats replacing traditional corks on the world's fishing nets, a prime example of the part new materials and new technology play in this oldest of man's industries.



CANNERS' CORNER



Q. Who developed the collapsed can?

A. Canco, of course—to make possible economical shipment of cans to Alaskan salmon canneries!

Q. What has Canco done to promote fish as a major food source?

A. Canco laboratories have publicized excellent nutritive values of canned mackerel, salmon, sardines in oil and in tomato sauce, shrimp, tuna, many others.



Canned fish
has excellent
nutritive



Q. Does American Can Company ever work with customers on special projects?

A. Frequently! For example, Canco helped to develop formulas for fish and clam chowders, oyster stew, fish cakes and other specialty products.



AMERICAN CAN COMPANY



NEW YORK
CHICAGO
SAN FRANCISCO

PACIFIC FISHERMAN

Vol. 55

No. 5

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A MILLER FREEMAN
PUBLICATION



N. F. I. Keeps Its Eye On Technology of Profit

• *Attention* to the techniques of production and marketing which promise to protect prosperity and produce profits marked the 12th annual National Fisheries Institute convention, which closed at Chicago May 1.

It was a convention with an eye to business, and the other eye on the future. For 1957-58 leadership it called on a young Californian, Aldo Casaretto of Los Angeles, who will be its president. Secretary for the past year, he rose to the top through no traditional advance, but rather as an award for merit, and for years of service to American fisheries.

• *Controversy* was absent, replaced by concord, with no fights over imports, tariffs, quotas, price-cutting, price-fixing, standards, surpluses, private enterprise or subsidies. So far as conflict was concerned, the fish people were too busy to be interested. The sound you heard was the buzz in business, rather than the thud of in-fighting.

What commanded attention? Films, primarily. Not movies films, plastic films—and foils. Then there were the possibilities of packing frozen sauce with ready-to-heat frozen fish; and there were the problems of glaze allowance, and of quality control; of whether prices *might* be getting dangerously high.

But the Technology of Tomorrow was the topic of the day—the endless possibilities of flexible plastic films; of vacuums within them, or of inert gases; of machines to draw vacuum or inject gases—these were the central subjects on which the National Fisheries Institute convention of 1957 seemed to dwell.

• *International* affairs of the American fisheries were viewed by the convention with remarkable amity. The feeling prevailed that they were being competently handled in the fisheries arm of the Department of State and the industrial advisors from the four corners of the country who counsel it on matters relating to the Law of the Sea, due for codification in the spring of 1958.

Congressman Thor C. Tollefson of Washington touched this point plainly: "This Institute has an international aspect, for it marshalls American fisheries thinking and action at a time when a single, sound American position is essential as we approach the 1958 conference which will write the International Law of the Sea."

• *National policy* on foreign fisheries trade, the territorial seas, and the rights of Americans upon them were spelled-out by Assistant Secretary of the Interior Ross Leffler in his first address before the American industry. The words were firm, their meaning plain, and much the same as have been said before:

"We are operating in an international economy. . . . The fish business happens to be one that many new and enterprising countries must depend upon to sustain their freedom and independence and the same principles which we so strongly treasure. The policy of the Eisenhower administration is to promote, foster and encourage international exchange of trade and to strengthen the economy of all freedom-loving nations."

And then: "We are sharing our market—the richest market in this world—and we have every right to have our fishermen work the waters which have been traditionally available to them."

Finally: "We must not only preserve the resource, preserve the fishing efforts and the fishing areas, but we must protect the right of United States fishermen to use the resources in those areas."

Manryo Netting

Needs No Preservative!

That's why a MANRYO FISHING NET is so rapidly and so widely gaining popularity in fishing circle in the world.



The above is the photograph of "No. 37 Taiyo Maru", a trawler, which belongs to the Taiyo Fishing Co., Ltd., one of the largest fishing companies in Japan. Since the adoption of Manryo fishing nets, it is said that her operation has become more successful. Today, the bulk of the Japanese trawlers are using Manryo fishing nets because they possess strong resistance to wear, economize labor and assure a better haul.

The photos below show the portion of the cod-end of trawl nets which are made of Manryo netting (left), and manila hemp (right) to make comparison of the conditions of wear both after having undergone operations of three voyages. They show that manila hemp has already worn out considerably, displaying greater roughness whereas Manryo shows almost no damage.



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**"Strength and Light Weight
of Nylon Nets
Mean Faster Handling"**

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NYLON NETTING—easier to handle, wet or dry . . .
resists rot and mildew . . . more economical in the long run

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for dependable light and power!

There's an Onan electric plant or generator the right capacity and type for craft of every size and purpose . . . shrimpers, trawlers, tugs, workboats of all kinds. They speed work and save time by operating electrical equipment such as bilge pumps, compressors, radios, pressure water systems and floodlights. Smooth-running and dependable; compact and easy to install.

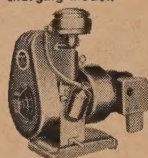
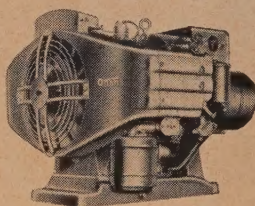
ONAN Air-cooled plants

Gasoline-powered—400 to 10,000 watts A.C. Battery charging and dual-purpose models.

Diesel-powered—5,000 watts A.C. (shown at right), 3,000-watt A.C. and 3,000-watt, 32-volt battery charger.

ONAN Water-cooled plants

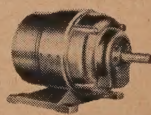
Gasoline-powered—400 to 3,000 watts A.C., battery charging and dual-purpose models. Diesel-powered—3,000 watts A.C. and dual-purpose A.C.-battery-charging model.



Model 3DSP, 3KW
Diesel-powered



1-cyl. battery chargers
500 to 1500 watts



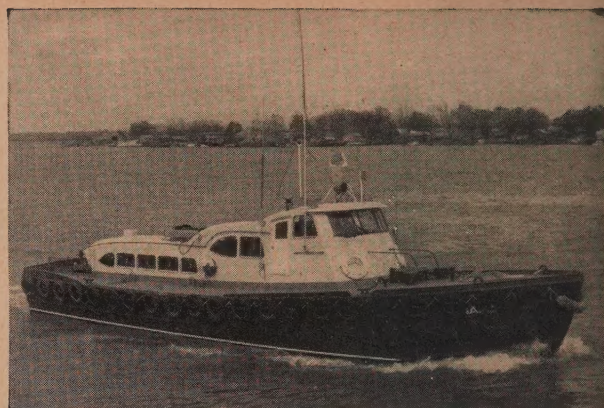
Separate Generators
1 1/2 to 35KW

Write for Folder of all Marine plants

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Marlin — This 65-ft. steel crew boat services offshore drilling platforms — and gets excellent service from twin 2 1/2-in. dia. x 20-ft. Monel shafts.

Workboat in a hurry to get men to work depends on Monel for long-life shafting

No time to lose in transportation!

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Standard on every workboat Sewart produces — 40-, 48-, and 65-footers — Monel nickel-copper alloy shafting assures their owners of long and trouble-free service.

That's because Monel shafts are extra *tough* — stay straight despite tremendous shocks. Extra *strong* — can take the torque of higher horsepower. Extra *stiff* — minimize whipping. Extra *hard* — stay smooth longer.

On top of all this, Monel alloy shafts are highly resistant to corrosion — even in the warm salt waters where Sewart workboats operate.

Monel pays its way at sea because it lasts longer! So look for Monel shafting in the boat you buy. Install Monel alloy when your present shaft fails or is no longer serviceable.

Specify Monel alloy for other marine applications, too — for gas and water tanks, galley equipment, rudder stocks. Specify it *wherever* hard use and severe corrosive attack team up against fittings or fastenings.

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ation-wide services and offices are listed on the back of this page

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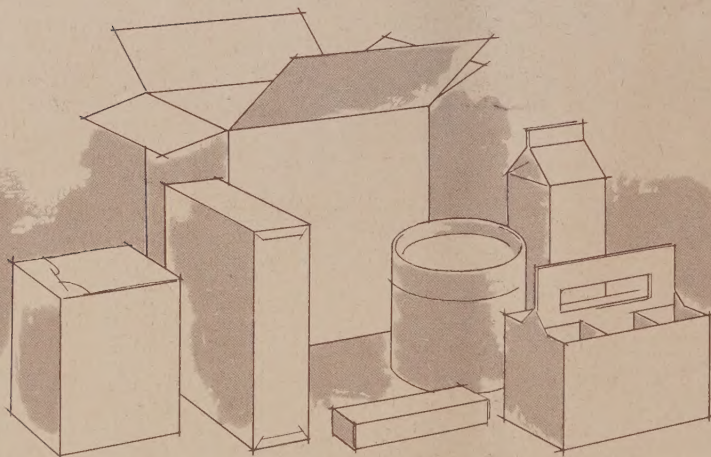
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B.F. Goodrich



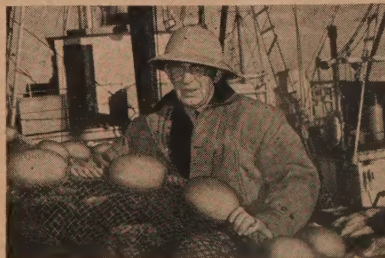
3200 Spongex floats do the work of 7000 conventional floats on this 9 ton net

3000 Spongex Floats celebrate their 5th birthday

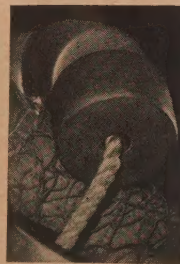
After 5 seasons' experience with over 3000 Spongex seine floats, Capt. C. H. Clark, fishing supervisor for Nelson Bros. Fisheries, Vancouver, B. C. and captain of their 122 ton flagship "Western Producer", says,

"I'm convinced Spongex floats are a major improvement over what we've had in the past. The floats on my net have been in service for five seasons and they look practically new. With conventional floats, I'd have started in the third set by now. Furthermore, Spongex floats absorb water, lose buoyancy—take valuable time to dry out. This doesn't happen with Spongex floats—they never absorb virtually no water at all.

"Another real advantage is a 1500 lb. reduction in total weight. This means lighter work for the crew and with the net carried on the stern a difference of about 5 tons in capacity of any bulk fish."



As fishing supervisor, Capt. Clark says, "Ultimately the entire fleet will be equipped with Spongex floats."



Since the oval floats have been in service, B.F. Goodrich has developed a cylindrical shaped float in 12 sizes from 3" x 1½" to 6" x 7½". Generally, these floats are believed to be even better than the original ones.

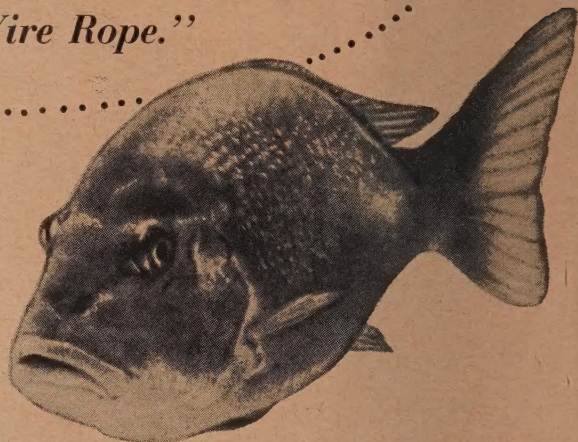
For more information write B. F. Goodrich Sponge Products, a division of The B. F. Goodrich Company, 345 Derby Place, Shelton, Connecticut.

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everybody! They must be using...
Roebbling Wire Rope."*



Special Galvanized Roebbling, he means. It's the really tough rope for the long haul. Handles easily throughout its long life and fights corrosion every inch of its length.

In a variety of types and sizes for shrimp rope, trawling rope and purse seine rope...just what you need when school's in session. Call your distributor or the nearest Roebbling office. John A. Roebbling's Sons Corporation, Trenton 2, New Jersey.

(Buy from the guy who eats your fish)

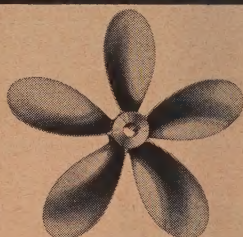
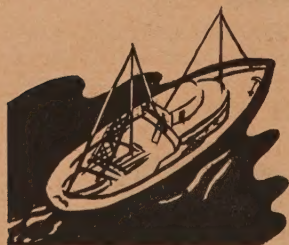
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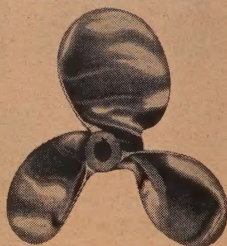


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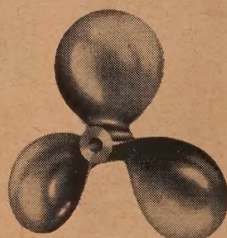
MICHIGAN
has the
WHEEL
that's BEST
FOR YOU!



THE MICHIGAN STAR



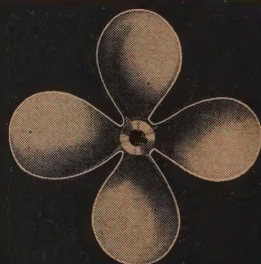
AQUA-MASTER



M-P

Whatever the conditions, the type of boat or its use, if it requires a wheel of 60" diameter or less, MICHIGAN can fit it with a wheel that will give your craft the finest performance of which it is capable. See your MICHIGAN dealer or write for our propeller analysis form and let our propulsion engineers give you a scientific propeller recommendation. It has paid tremendous dividends for thousands of boat owners.

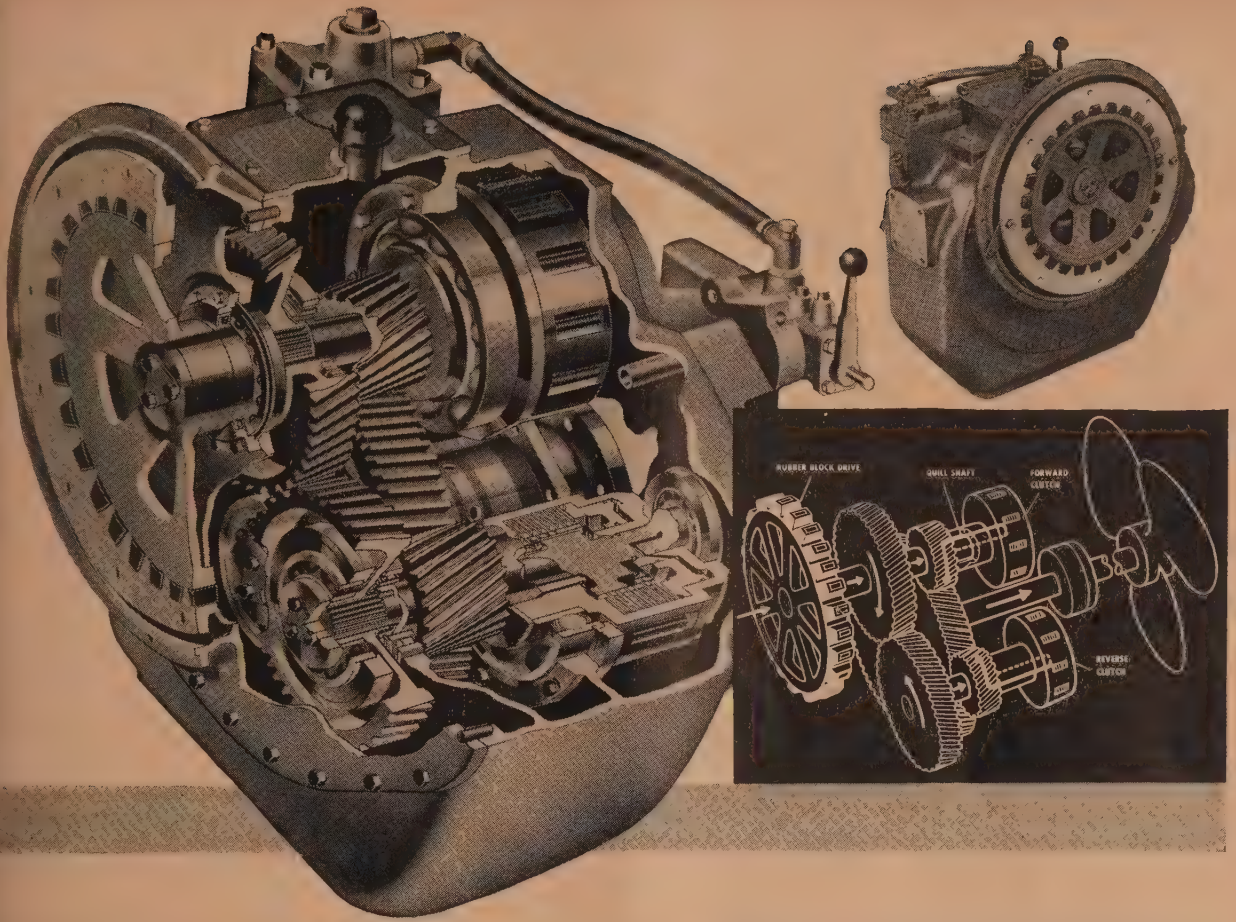
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usually can be completely restored
at the factory or any of our 25
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It has one-third more blade area than 3-blade wheels of same size, and thus provides better cruising speed at proper engine RPM... more power when needed and worthwhile economy of operation. Available in MICHALLOY XX, the metal that's stronger than stainless steel and prevents 80% of haul-outs in hazardous waters.

MICHIGAN WHEEL CO. GRAND RAPIDS 3, MICH



answer to marine power transmission . . .

Twin Disc MG-511 Marine Gear!

Designed specifically for today's high speed, high horsepower marine engines, the new Twin Disc Model MG-511 Marine Reverse and Reduction Gear is the answer to marine power transmission for engines up to 240 continuous horsepower at 2100 rpm.

One of the outstanding features of the new MG-511 is its *extreme compactness*. It has an unusually short length of only 17 $\frac{1}{8}$ " from the SAE housing flange to the output propeller shaft flange!

Twin Disc Rubber Block Drive is used to transmit power to the gear. This tough, time-tested drive withstands normal misalignment conditions without imposing undue loads or stresses on

the marine gear or the engine crankshaft.

Two *oil-actuated, oil-cooled*, multiple plate clutches are not only *actuated* by oil, but oil is *pumped* into the heart of each clutch. This *flood of oil* carries away heat, assures smooth engagements and substantially reduces clutch plate wear.

The MG-511 is also designed to facilitate easy servicing. The clutches and pump are so arranged that removal of a few screws is all that is necessary to make them easily accessible for simple, speedy servicing when necessary.

Other important features of particular interest are: fingertip control, full horsepower operation

in both forward and reverse, and all gears straddle-mounted on anti-friction bearings.

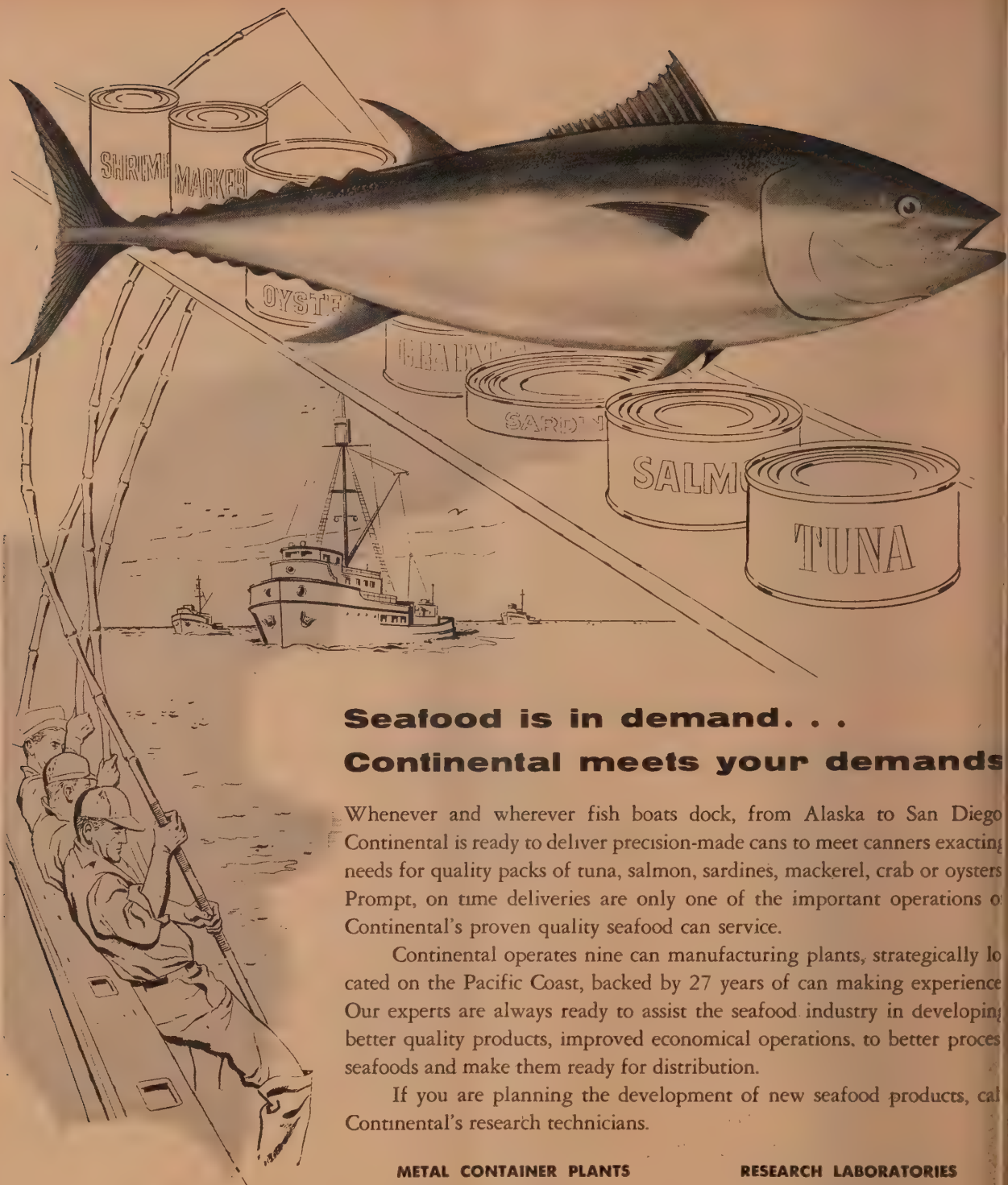
If your boats are in the 100 to 240 hp, 1000 to 2100 rpm range, get complete information *now*, on the new Twin Disc Model MG-511 Marine Reverse and Reduction Gear. Write *today*, to Twin Disc Clutch Company, Racine, Wis. Request Bulletin No. 307.



TWIN DISC

Marine Gears

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Whenever and wherever fish boats dock, from Alaska to San Diego Continental is ready to deliver precision-made cans to meet canners exacting needs for quality packs of tuna, salmon, sardines, mackerel, crab or oysters. Prompt, on time deliveries are only one of the important operations of Continental's proven quality seafood can service.

Continental operates nine can manufacturing plants, strategically located on the Pacific Coast, backed by 27 years of can making experience. Our experts are always ready to assist the seafood industry in developing better quality products, improved economical operations, to better process seafoods and make them ready for distribution.

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Letter from

LIMA

Lima, Peru—April 27.—Comprehensive report on four weeks of editorial searching just isn't possible in the scope of a letter. Moreover, it would not be desirable to undertake here to deal exhaustively with even the highlights of a fishery which extends for 1400 miles along the continental coast of South America. After four weeks of editorial study, a great mass of material has been accumulated. This letter serves only to touch a few of the points, and notably those which are *current*.

That is the character and scope of a newsletter, and that is what this seeks to be.

● *Scientific research* is only in its barest beginnings in these fisheries. What little work has been done before has been of very general character. As a matter of fact, the field is almost as Charles Darwin and Alexander von Humboldt left it.

Today, however, this is changing; and it is a matter actually of *today*. Within the past few weeks there has been organized in Peru an Oceanic Research Commission which is charged with administering the research work of the four Peruvian elements primarily interested in the sea: the Navy, the Governmental Guano Monopoly, the National Department of Fisheries, and the Peruvian Fishing Industry. The Commission has as its chairman Admiral W. Gerado, Commandant of the Naval Academy; and as its treasurer Manuel Elguera, an outstanding figure in the fishing industry of Peru.

The Commission is in consultation with Scripps Institution of Oceanography and the Inter-American Tropical Tuna Commission in the matter of choice of a director for its scientific program. It may be anticipated that the Peruvian Research program will move in close concert with these two other scientific agencies.

American industry has a definite stake in all this, for the funds of the Peruvian Commission are derived in a large part from the fees paid by American tuna vessels for the privileges which they enjoy off the coast of Peru, privileges which thus contribute to the world's scientific knowledge of the Pacific waters along the coast of South America below the equator. The funds paid by the Amer-

This was received at press time from the editor of **Pacific Fisherman**, writing from Lima, Peru, where he has spent a month in an editorial study of that country's fisheries, foremost on the South American Continent.

This letter is merely a preliminary glimpse at a subject which will be dealt with comprehensively in a complete issue of **Pacific Fisherman**, to appear within a few months.

ican tuna vessels go entirely for this project. They are supplemented in some degree by additional funds available from Peruvian sources.

● *El Nino* is the name given by Peruvian fishermen to the condition which has been prevailing along this part of the coast since about the first of the year. The term means "the child" and refers to the fact that this peculiar climatic condition, when it does occur, always falls at or immediately following Christmas.

"El Nino" is characterized by the phenomena of warm waters prevailing close to the coast, much further south than is usual here. This apparently forces the Peruvian current offshore and produces a condition of warm weather, abundant rains, and poor fishing.

When this warm water condition occurs along the coast, tuna fishing is somewhat further south. Bonito fishing is sketchy, sporadic and unproductive. The "El Nino" condition may not occur for a number of years, and is usually expected about every seventh. On the other hand, the last one of record was in 1953.

This year's warm water condition cut production of bonito very substantially during the months of January and February. Another interruption in production occurred only a few days ago in the extreme northern end of the

Peruvian coast. Immediately prior to *Pacific Fisherman's* call, in fact the night before, the coast in the vicinity of Mancora was treated to a deluge which put plants out of operation and destroyed highway communication. More rain fell in two hours than had occurred in all the years since the last "El Nino" put together.

In short, climatic conditions thus far in 1957 have produced an unusual pattern for Peru. Results economically have varied widely and production, measured broadly, is somewhat below expectations.

● *Gear development* advances rapidly in Peru, for it seems that in the field of fishing there is a need for the industry to catch up with packing. Canneries, reduction plants and freezers appear to have capacity beyond the immediate productive ability of the fleet.

Boats are building, and more will be built, of course; but operators and fishermen also find in gear improvement, a more immediately effective means of lifting productive capacity afloat. For example: synthetic nets are being widely accepted and continually increase in use. Most of them are Dupont nylon of Canadian netting factories and Japanese netting made of marlon. In the field of cotton netting Peruvian dominates, with its wonderful long-staple local Peruvian cotton.

Power blocks have made their appearance here and have been instantly successful. Plastic floats displace cork everywhere. You see chain and lead lines on the new tuna seines. Some day you will see the Peruvian fleet equipped with radiophones and electric gear, but that is a few years away. The prospect for growth there is very bright.

● *Anchovy reduction* is currently the most active element in Peruvian fishery growth. There have been many plants installed in recent years and a considerable number are now in process of construction and equipment. The government has limited reduction plants to those presently installed or licensed, and outstanding licenses must be actively exercised by the end of 1957.

This action by the government apparently is a concession to those who feel that it is better to let the billions of Peruvian birds use the fish for the manufacture of guano than it is for Peruvian fishermen to catch them for fishmeal and oil, with greater economic return.

However, this is generally regarded as a holiday rather than a prohibition, and a field in which marine research can point the way for the future.

● *European machinery* is making long strides in the equipment of the Peruvian reduction plants. While it is true that in the older plants and where used equipment is installed, the great majority of it is of American manufacture, the fact must be faced that where new plants are installing new equipment most of it comes from Europe.

German machinery leads in this growth, with Danish close behind and Norwegian third. It is significant that in most cases, and definitely in the case of the German equipment, cost of this machinery installed in Peru is substantially higher than that for American reduction machinery of equal capacity.

● *Panama's entry* into the field of fish reduction this year, and the prospect that it may be substantially extended, carries implications of possible importance to the American tuna industry.

There are two reduction plants active in Panama today, with combined capacity of 25 tons of fish per hour. Other plants are projected.

Of the two reduction factories now active, one has been running for only one month. These two plants are located at Tobago Island and at Caimito. They are reported to be offering \$10.00 per ton for anchovetas, herring, and other

small fishes of this character.

The implications for the tuna industry lie in the fact that the fish of these species in the Gulf of Panama already are subject to substantial utilization as live bait for tuna fishing. The effect of a growing reduction fishery on the abundance and availability of the bait fishes of Panamanian waters will be followed closely by the clipper fleet.

Study of the effect of increased fishery upon the condition of the tuna bait fish resource falls within the authority of the Inter-American Tropical Tuna Commission, which may be expected to check the trends closely by the scientific standards which it employs.

● *Newest fishery* in Peruvian waters is that for shrimp. It centers almost wholly in the north, in that portion of the coast from Mancora to Tumbes.

Here a substantial fleet of otter-trawlers is operating, and producing shrimp of prodigious size and excellent quality. Shrimp counting above 15 to the pound are almost unknown. The pack falls into two general size categories, under-10, and under-15. Actually, the under-15 are usually under-12. Only shrimp counting under-10 to the pound are accorded the top brands.

The active fleet in this fishery includes a number of American-built and American-type shrimpers which have come from Florida waters for the purpose.

Ultimate growth of the shrimp fishery so far as Peru is concerned appears to be handicapped somewhat by the fact that abundance seems to be associated with the fresh water conditions prevailing in and off the Gulf of Guayaquil, in Ecuador; and Peru and Ecuador have an understanding which limits the activities of their national fleets off the coasts of adjoining countries.

That's about all for now but there will be a lot more later on. Just remember, the waters of the Peruvian current are among the most productive in all the world, apparently comparing favorably with those of the North Sea, of the coasts of British Columbia and Alaska, of the seas about Kamchatka and Japan, and the icy ocean from Norway to Iceland. But those areas have been heavily fished for many years, some of them for centuries.

Here in Peru industrial fishing is only in its beginnings, less than twelve years old.

Whence the Power Comes

● Source of the amazing leverage, power and pressure which sports fishermen are able to generate in their dealings with legislatures, Congress and executive officials is the weight of numbers.

Too often the commercial fisheries underestimate the massive character of the sportfishing population, as well as the fanatic conviction of some of the fraternity's leaders.

Here are some recent figures which cannot be misinterpreted or misunderstood. They represent the number of sport fishing licenses issued by each of the three Pacific states in the 12 months ending June 30, 1956:

California	1,319,190
Washington	410,772
Oregon	330,417

Total 2,060,379

During the same period in the United States as a whole there were 18,701,983 sport fishing licenses issued.

Even if you discount this figure somewhat for licenses issued to persons under 21, it still figures better than 18,000,000 votes—a prime consideration with any politician.

Blueprint for the Fraser

Tentative Sockeye Regulations Set; Action on Pinks Deferred

When the International Pacific Salmon Fisheries Commission meets with its advisory board in Vancouver, B. C., May 8-9, the ground will be cleared for this season's Sockeye fishing operations in treaty waters, and when the Commission met in Seattle early in April hope was expressed that the Vancouver session might also be able to clarify the situation on Pinks.

While the Pink salmon fishery is to be managed by the Commission along lines similar to Sockeye, as a result of the international agreement recently arrived at, the necessary legislation covering this enlargement of the Commission's power has not yet been completed in the U. S., and the Commission felt that it would be presumptuous to establish a program for this year's administration of the Pinks until final action had been taken at Washington. Canada has moved faster on this legislation than the U. S. and so far as Ottawa is concerned, the necessary preliminary negotiations and legislation have been finalized, with the Commission empowered to proceed with study or regulation of the Pink fishery.

Although unable to act directly on Pinks, the Seattle meeting made solid progress; received a factual summary from the retiring chairman, Robert J. Schoettler, and was advised by Loyd A. Royal, director, regarding the experience of the Fraser River Sockeye fishery last season and the prospects for 1957. Mr. Royal also outlined proposed regulations for the Sockeye fishery for the coming season.

These tentative regulations, explained Mr. Royal, were offered only after a careful analysis of all available data relating to the actual fishery in 1955 and 1956. Studies were made of the relative efficiencies of each of the various types of gear operating in each area for all of the races comprising the 1957 run of Sockeye.

"For purposes of analysis," said Mr. Royal, "the 1957 Sockeye run was divided into four periods, the fourth period being controlled by any regulation designed for the conservation of Pink salmon. The timing of the 1957 run was assumed to be the same as in 1949 since there is reason to believe that the timing of the Sockeye runs normally change on the eight year cycle of the moon phase. Expected fleet sizes by periods had to be estimated but those used in any calculations are believed to be conservative.

● Tentative recommendations for regulatory control of Sockeye fishing in convention waters for 1957:

"In the convention waters of Juan de Fuca Strait lying westerly of a straight line drawn from Angeles Point in the State of Washington across Race Rocks to William Head in the Province of British Columbia:

"(a) Taking Sockeye salmon shall be prohibited from four o'clock in the forenoon of Monday, June 24, 1957, to four o'clock in the forenoon of Monday, July 22, 1957.

"(b) Taking Sockeye salmon by means of purse seine fishing gear shall be prohibited from nine o'clock in the afternoon of Wednesday of each week to four o'clock in the forenoon of the Monday following and by means of gill net and trap fishing gear from eight o'clock in the forenoon of Thursday of each week to six o'clock in the afternoon of the Monday following between July 22, 1957, and August 19, 1957, both days inclusive.

"In the convention waters of the United States of America lying easterly of a straight line drawn from Angeles Point in Washington across Race Rocks to William Head in British Columbia:

"(a) Taking Sockeye salmon by means of purse seine and reef net fishing gear shall be prohibited from nine o'clock in the afternoon of Wednesday of each week to four o'clock in

the forenoon of the Monday following and by means of gill net fishing gear from eight o'clock in the forenoon of Thursday of each week to six o'clock in the afternoon of the Monday following between June 26, 1957, and August 19, 1957, both days inclusive.

"In the convention waters of Canada lying easterly of a straight line drawn from Angeles Point in the State of Washington across Race Rocks to William Head in the Province of British Columbia:

"(a) Taking Sockeye salmon shall be prohibited from five o'clock in the forenoon of Friday of each week to five o'clock in the forenoon of the Tuesday following between June 26, 1957, and July 31, 1957.

"(b) Taking Sockeye salmon shall be prohibited from five o'clock in the forenoon of Thursday of each week to five o'clock in the forenoon of the Tuesday following between July 31, 1957, and September 10, 1957.

"All times hereinbefore mentioned are Pacific standard time."

● Mr. Schoettler, at the outset of the meeting, paid tribute to the spirit of co-operation that had prevailed among Canadians and Americans during his term of office in the cause of effective conservation and resource management.

"Never in history have two coun-

Assumed Fleet Sizes—1957 Season

	Canadian West Coast			Puget Sound		
	P.S.	G.N.	Traps	P.S.	G.N.	R.N.
Before July 22	0	0	0	200	400	80
July 22 to Aug. 18	80	150	5	250	600	100
Aug. 19 and after	110	250	5	250	600	100

Mr. Royal said:

"Under the proposed regulations and using the above assumptions the theoretical catch should follow the pattern listed below. It should be emphasized that any variable in the

basic assumptions will necessitate emergency adjustments during the season so that the proper racial escapement will be obtained, the maximum allowable catch will prevail and equal division of the catch will result.

Catches (% of total run), Escapement, and Division

	Before July 22	July 22 to Aug. 10	Aug. 11 to Aug. 18	After Aug. 18	Season Total
United States Total . . .	44½ %	36 %	29½ %	24 %	35.5 %
Canadian Total	26½ %	38 %	40 %	42 %	36.1 %
Gross Escapement	29 %	26 %	30½ %	32 %	28.4 %
Indian Catch					2.4 %
Net Escapement					26.0 %

tries approached each other on an international problem with such a spirit of unselfishness and deep desire to cooperate," said Mr. Schoettler. "Never in history has so much been accomplished in such a short time. Truly this is primarily a credit to the intelligent understanding and unselfishness of the fishing industry of each country."

Mr. Schoettler discussed what he considered to be the two major problems confronting the salmon runs of the Fraser River—the excess of gear and the threat of hydro-electric power encroachment on the Fraser. Regarding the first, he hoped that each national group could arrive at some measure of control which would have the desirable end of increasing the fishing time, a five-day fishing week being regarded as a necessity to positive and stable control of the industry.

As for the power threat, Mr. Schoettler said the problem could be largely solved by an early and equitable agreement between the U. S. and Canada

on downstream benefits resulting from development of the Upper Columbia River in Canada. "The U. S. fishing industry," he said, "has a vital interest in the program of the Columbia River negotiations, for the power needs of British Columbia can be met for a number of years by full development of the hydro resources of the Upper Columbia."

"When one considers that there are over 100 dams on the Columbia River and over 50% of this power is going to the manufacture of raw aluminum and further that there are no dams seriously interfering with fish on the Fraser River we can be hopeful that the full potential of the Fraser River as a fish producer can be demonstrated in time to save the world's greatest salmon stream from the fate of the Columbia."

Mr. Schoettler commended the efforts of Canadian legislators and administrators, members of the Commission and its staff in safeguarding the Sockeye resources of the Fraser.

lingham, Alaska; Harold E. Lokken, Fishing Vessel Owners Association, Inc., Seattle; Lowell Wakefield, Wakefield's Deep Sea Trawlers, Inc., Seattle.

From the U. S. Fish & Wildlife Service were: D. L. McKernan, director, Bureau of Commercial Fisheries, Washington, D. C.; Dr. L. A. Walford, chief, Branch of Fishery Biology, Washington, D. C.; William M. Terry, Washington, D. C.; C. E. Atkinson, chief, Pacific Salmon Investigations, Seattle; Dr. W. Royce, research director, Alaska Commercial Fisheries, Juneau.

William C. Herrington, Washington, D. C., special assistant for fisheries to the Under Secretary, represented the Department of State.

Dr. W. F. Thompson represented the University of Washington.

Fish & Wildlife Service Make Key Appointments

Mr. Donald L. McKernan, Administrator, Alaska Commercial Fisheries, and Andrew W. Anderson, Chief of the Branch of Commercial Fisheries, have been named Director and Assistant Director in the Bureau of Commercial Fisheries of the reorganized United States Fish and Wildlife Service. Both men are career fisheries employees of the Service.

Mr. McKernan had extensive research and administrative experience with the Washington State Department of Fisheries and service for 3½ years with the Service's Pacific Oceanic Fishery Investigations in Honolulu. He is a graduate of the University of Washington, and has completed more than two years of graduate work there.

Mr. Anderson, also a graduate of the School of Fisheries of the University of Washington, began his career with the Bureau in 1930 as a statistical and marketing agent, and since has held many responsible positions both in an advisory and administrative capacity.

Alaska Commission Holds Organization Meeting

The newly created Alaska Fish and Game Commission held its first meeting in the offices of the Alaska Department of Fish and Game at Juneau, from April 20 to April 22. Attending the session were Robert C. Kallenberg, Dillingham; Eugene Torkilsen, Kenai; Howard Wakefield, Port Wakefield; and Douglas Babcock, Juneau. Robert Kallenberg was elected chairman and presided during the session. All matters of a policy nature were passed over until the fall meeting of the Commission when it is expected the full seven man commission will be present.

Work Progressing Well INPAC Section Told

At the April 9-10 Spring meeting in Seattle of the United States Section, International North Pacific Fisheries Commission it was felt that the work of the U. S. Section is progressing satisfactorily to the end that this country's interests will be thoroughly protected, according to Milton E. Brooding, commissioner and chairman of the section, California Packing Corp., San Francisco.

There was a general review of the Tokyo meeting in March (See April, 1957 **PACIFIC FISHERMAN**, pg. 16). The U. S. program presently is based on research expenditures of \$700,000-\$900,000 during the summer of 1957.

One of the principal research activities will be extended salmon tagging operations conducted by the Fisheries Research Institute, University of Washington, Seattle, under Dr. W. F. Thompson, director.

Extensive exploratory fishing will be conducted by the U. S. Fish & Wildlife Service in an effort to determine ocean distribution of salmon and to secure samples of various species at different locations. This study will be accompanied by oceanographic observations, etc.

Marked progress is being made in racial studies of salmon, analyzing the body characteristics of the fish found

in the many areas of the North Pacific.

All of this work is directed toward the question of the distribution of Asiatic salmon as compared to American salmon within North Pacific waters.

Presently Japan has agreed to abstain from fishing salmon east of 175° west longitude but this line is subject to future reconsideration as information develops relative to the distribution of the salmons of the two continents.

Considerable study is being made of Bering Sea king crab inasmuch as that fishery is now being prosecuted by both Japan and the United States.

All of this information ultimately will serve as a basis for continued application of the treaty agreement between the United States, Canada, and Japan.

Presiding over the meeting was Mr. Brooding. Other U. S. commissioners were Edward Allen, Seattle attorney, and John H. Clawson, Anchorage, Alaska. Members of the advisory committee were: C. L. Anderson, Alaska Department of Fisheries, Juneau; W. C. Arnold, Alaska Salmon Industry, Inc., Seattle; Larry Fitzpatrick, Juneau; Milton C. James, Oregon State Fisheries, Portland; George Johansen, Alaska Fishermen's Union, Seattle; Robert C. Kallenberg, Dil-

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Research — and More Research

● Progress in research in the tuna industry has been the keynote in recent developments in the Southern California fisheries.

The ninth meeting of the Inter-American Tropical Tuna Commission, administrative headquarters in Point Loma, San Diego, was held in San Jose, Costa Rica, in March.

Outlined was the following program of investigations for the fiscal year of 1957-1958: (1) collection, compilation and analysis of catch statistics, logbook data and related information for the tunas and bait fishes; (2) investigations of life history, biology, and population structure of the tunas; (3) tuna tagging, including tagging throughout the year from local vessels based at Paita and Mancora, Peru; (4) continuing analysis of existing oceanographic and meteorological data; (5) research on bait fishes in the Gulf of Nicoya and Gulf of Panama.

● The Commission had previously issued a report on its research on changes in tuna abundance. Quoting this: "The manner in which the apparent abundance of this species exhibits marked changes inversely to changes in fishing effort indicates that the fishery has had a real effect upon the stock of yellowfin during the period studied. This, of course, is the inescapable consequence of effective exploitation, and shows only that the rate of fishing is sufficiently high to noticeably affect the average size of the population."

The report goes on to state that the conclusions on yellowfin fishing relate to the average condition, "considering the Eastern Pacific yellowfin tuna stock as a whole. It may well be that the stock is divided into sub-populations and that the fishery bears unevenly upon these units.

● As for skipjack, the Commission's report states that the catch per standard day's fishing shows marked fluctuations which do not appear to be associated with intensity of fishing. Such fluctuations may be related to variations in availability, due, perhaps, to changes in the habits of the fish or to changes in the environment, or to presence of dominant year classes. The research of the Commission indicates that it is possible to increase greatly the average annual catch of skipjack on a sustainable basis.

Further research by the Commission, from logbook data, etc., shows that in recent years, "coincident with

the higher fishing intensities, there has been a decrease in the proportion of large yellowfin and a corresponding increase in the proportion of small yellowfin in the catch from the Eastern Pacific. . . . It is well known that the very largest yellowfin inhabit the deeper waters, where they may be taken by long-line fishing in the Western Pacific."

● To serve the tuna industry, a new report by the Department of the Interior has been issued: a study of the nature of green or offcolor pre-cooked yellowfin. This report was based on research conducted from the Chemistry Department of the University of Hawaii.

Conclusions: (tentative) color changes, including greening, that take place in tuna on cooking are the reactions of the normal pigments of the flesh with other ingredients of the flesh or with the environment. Secondly, the research staff are inclined to believe that differences between normal and green flesh lie chiefly in the differences in concentration of certain of the common pigment derivatives.

In the matter of canned tuna, the Food and Drug Administration extended the period for filing objections to a proposal for a definition and stan-

dard of identity and standards of fill of container for canned tuna. This places the time of filing in mid-May, and subsequently, the Federal Register will publish an amended order, based on modifications from the industry.

● Again, emphasis on research, work on the control of the quality of fish refrigerated at sea, such as tuna, as its handling from the boat is continuing, with results being reported from various laboratories on the Pacific Coast. Studies seem to be following along the channel of observations of texture changes in fish resulting from freezing, and of the differences of a frozen fish product when given a quick or a slow frozen treatment.

Research of this kind, as it concerns seafood products, emphasizes cell-puncture; effect of ice crystal size; rate of chilling; refrigeration capacity; freezing under pressure; thawing and re-freezing; salt absorption.

In the international fishery field of research, affecting tuna, there comes into focus the problem of disposal of radio-active wastes in the seas and oceans. It is stated by the director of fisheries division of the Food and Agriculture Organization that "at present the danger is potential rather than actual."

Japan and Soviet Sign 1957 Fisheries Agreement

Signing of a Soviet-Japanese protocol in Tokyo April 7th fixing Japan's salmon catch this year in the restricted zone in the North Pacific concluded over 50 days of negotiations between the two countries. Present at the signing ceremonies were Agriculture-Forestry Minister Ichitaro Ide of Japan and First Deputy Fisheries Minister Aleksei Kuttyrev of the Soviet Union.

In a joint communique, announced following the signing ceremony, the most important steps settled were as follows: Total annual salmon catch for Japan in the restricted zone will be 120,000 metric tons for 1957; salmon catch in the Sea of Okhotsk in 1957 not to exceed 13,000 metric tons

and taken by no more than 2 mother-ships; for conservation of Red salmon, fishing to be suspended after July 20 in waters of Bering Sea and North Pacific north of the 52° parallel, west of the E.L. 170°25' line, and east of the Kamchatka Peninsula. Specific restrictions were also placed on small her-ring, trawl fishing and other operations using moving fishery tools, as well as the crab catches in certain areas.

The Commission worked out a basic policy for the coordination of scientific inquiries into fishery conditions in the restricted zone, and will exchange various statistical data for 1957 and the ensuing years.

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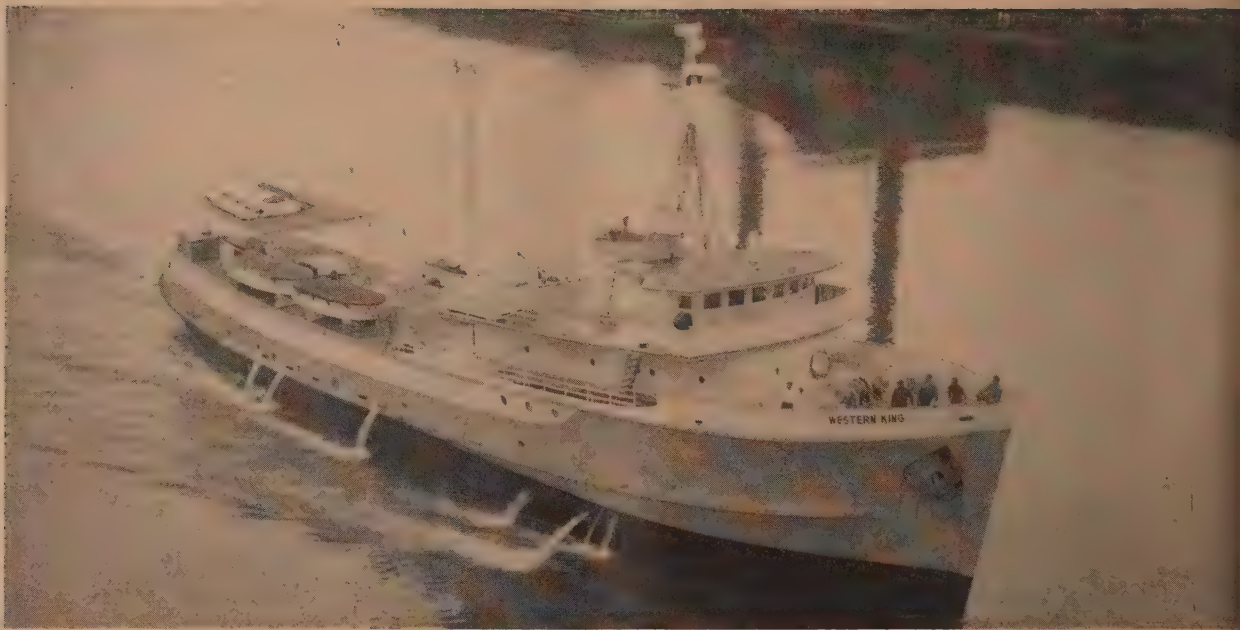
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A-1027



New Concepts For the "King"

Keep Competitive by Cutting Clipper Maintenance Charges

● Commissioned in the concept that a capable, economical, effective and modernly-equipped American tuna clipper, fished aggressively in the key waters of the world, can supply American canneries with American fish, the *Western King* went fishing this spring from Tacoma.

She's the newest member of the top-size class of American tuna vessels, a 170-footer, with net tonnage of 369. Originally ATR 80, this great clipper is the property of the Martin Petrich family's Western Boat Building Co., which for two generations has been building fishing vessels—and operating them also, for it has been a basic principle of Martin Petrich, 76-year-old head of the house, that a builder can learn best what fishing boats should be by operating them; and that nothing makes a builder so conscious of costs as incurring them.

Western King will deliver her cargoes to the National Packing Co., subsidiary of Van Camp Sea Food Co., cannery at Ponce, Puerto Rico, whether she takes them in the Pacific, Atlantic or Caribbean—and she is expected to fish in all these waters; possibly in others, for she has the

power, capacity and seaworthiness to fish in any of the world's tuna waters.

● Beside being big, *Western King* is powerful—as befits a king. Deep in her hull is a Fairbanks-Morse opposed-piston diesel, the engine developed to drive submarines, delivering 1600 hp. Flanking it are two Superior diesel auxiliaries of 230 hp., turning 150-kw., 220-v. Westinghouse generators. A General Motors diesel is the stand-by auxiliary, turning a 60-kw. generator.

Refrigeration for her cargo space, capable of freezing and keeping frozen about 600 tons of tuna, is provided by three big York compressors, twin jobs, 7½ by 7½", each powered with a 60-hp. Westinghouse motor.

Pumping is a prime function on a tuna clipper, and falls into two specialized divisions, apart of course from the ordinary pumping requirements of any vessel—sanitary, bilge, fire, fuel transfer and what not.

The clipper's specialized pumping requirements of course are for: (1) bait wells and tanks; (2) brine circulation in the cargo wells.

The pumping responsibility was

given to Fairbanks-Morse equipment throughout the vessel. Bait water is provided by three vertical 12" units, one of which is a two-speed, for reasons to which we'll return later.

Then there are 16 Fairbanks-Morse 3 by 3" motor pumps for circulating the refrigerated brine in the cargo wells.

New Concepts of the "King"

● Actually more important than size, power and equipment in the *Western King* are two new concepts manifest in this enterprise. It is in these particulars that the vessel and the operating program of which she is the initial manifestation are specially notable.

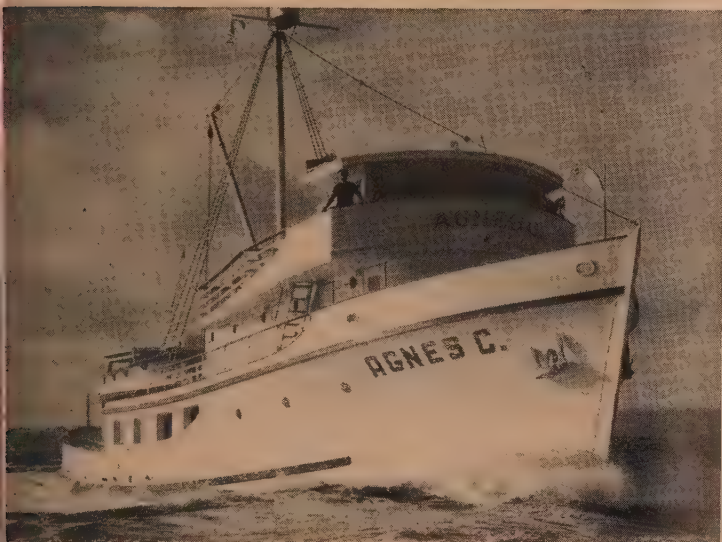
The two special concepts apparent in the vessel concern (1) her area of operation; (2) provisions for reducing some costs of that operation, notably in the matter of maintenance.

It would be too much to say that *Western King* in either of these fields is an absolute pioneer. Other vessels, perhaps, have gone where she will go and have been equipped in one particular or another as she is equipped. However, she was designed and fitted

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Overlaid fir plywood, used for deck, house and canopy construction on the *Agnes C.*, built in 1951 by Western Boat Building Co., Tacoma, Wash., proved so satisfactory that the same rugged material was chosen for similar uses on the *Western King* (left). This is the world's largest tuna clipper, recently completed by the same builder.

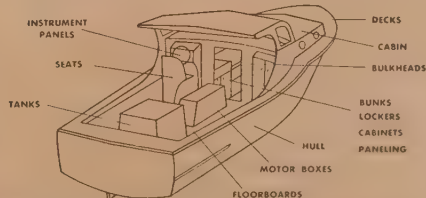


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Exterior fir plywood saved 30% building time on these seine skiffs, by Azulin-Cole Shipbuilding Corporation, Tacoma, Wash. The craft are lighter, stronger, last longer than former models. RIGHT: Fir plywood fish well developed by Paul Autio, Astoria, Oregon, saved about the cost of standard well, and licked the electrolysis problem.



Tuna Clipper Western King. (Inset) Capt. Earl Peterson, skipper.



WESTERN KING

LENGTH: 170' (converted ATR hull)
CAPACITY: 700 tons of tuna
POWER: 1600 hp. Fairbanks-Morse diesel
AUXILIARIES: Two 230 Superior diesels; One 60-kw General Motors Detroit diesel
REFRIGERATION: Three 7½ x 7½" York (twin) compressors
BAIT: 8 wells; 3 boxes
FUEL: 38,000 gal. in permanent tanks; 75,000 gal. in cargo wells
STEERING: Sperry Electro-Mechanical and Automatic Pilot
SOUNDERS: Two Raytheon Fathometers
RADAR: Raytheon, SO-1 modified
RADIOPHONES: Two RCA Radiomarine; 150 and 100-watt
TENDERS: Two 18' Western Fairliners, Chrysler-powered

WESTERN Plays Its KING

Big and powerful as befits a King—the Western King enters the world tuna trade with facilities unmatched in efficiency, equipment, arrangement, versatility and economy.

An American tuna clipper—capable of fishing anywhere in the world to provide American canneries with American fish for the American consumer.

The Western King joins the large fishing fleet built by the Western Boat Building Company as the newest member of a famous family of boats.

A family of boats, built by a famous family—Martin Petrich and his five sons—Hervey, Allen, Martin, Jr. James, and John.

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or operations in a wide area of many seas, you might say *all* seas; and not in a relatively limited trade. Other clippers have fished outside the usual "Tuna Trails," of course; and from their experience much has been learned. The Petriches have sought to combine these lessons and sound solutions to the problems in *Western King*, because—

They want her to be fitted in power and range and seaworthiness and refrigeration capacity to be able to fish and deliver American tuna to American canneries wherever they may be situated most advantageously and most profitably with respect to the fishing grounds.

This is in line with her initial assignment, which calls for her to deliver tuna to the Puerto Rico cannery of the Van Camp Sea Food Co. Where will she fish? Wherever tuna are to be found most advantageously with respect to this American cannery. This may be in the Pacific; or possibly in the Atlantic, down the northeasterly coast of South America; or perhaps in the Caribbean Sea hard-by Ponce and its American base and cannery.

Attack on Maintenance Costs

● No aspect of *Western King* is more interesting or more important than the degree to which her owners have undertaken to furnish the vessel with those protective materials which promise to reduce the heavy cost of maintenance of fishing vessels operating under tropical conditions.



Allen (left) and Hervey Petrich (right) of the Western Boat Building Co., with Earl Peterson, master of the *Western King*.

Here's where the advantage of a vessel-operating boat-builder comes in. As an operator, he sees the effect of corrosion, electrolysis, fouling, mechanical and electrical wear and deterioration under the severe conditions of the tropics. Further, he gets the bills for maintenance; pays the cost of corrosion and all the other gnawing conditions which cripple a vessel if she isn't constantly maintained.

As a builder, he sees how and where corrosion works; he knows that actual sinkings come about because sea fittings have been attacked; and that there are modern materials which may serve to save weeks on the ways.

● This dual role as builder and operator led the Western Boat Building Co. to the conclusion that one of the economic problems of the tuna industry lies in the extreme cost of vessel

maintenance. Although itself a boat builder, the firm was convinced that one of the longest steps which could be taken toward making tuna vessel ownership and operation a profitable investment was in the careful, scientific, unstinting application of modern protective materials and devices.

This they have done in *Western King*; this they are doing in *Western Ace*.

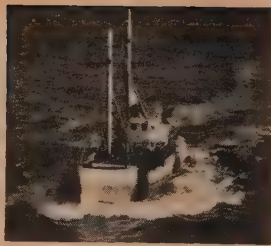
These protective provisions—some of which actually are mechanical—fall into several categories:

Corrosion—Here wide reliance has been placed on "Dimetecote," a system of cold galvanizing, employed in combination with "Amercoat" in two specifications. All these materials are manufactured by The Amercoat Corporation, Los Angeles. All refrigeration coils, and all steel cargo and bait

Honor count of 4 is represented by these two top cards of the Petrich tuna clipper hand, here moored in Tacoma just before the *King* went fishing for the Van Camp cannery in Puerto Rico and the *Ace* entered on a program of conversion for strictly tuna service.



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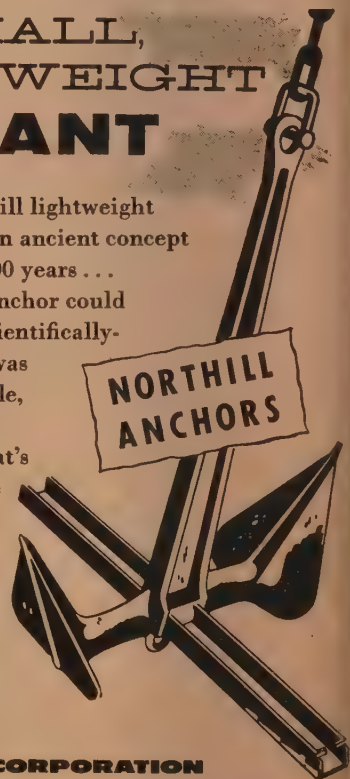
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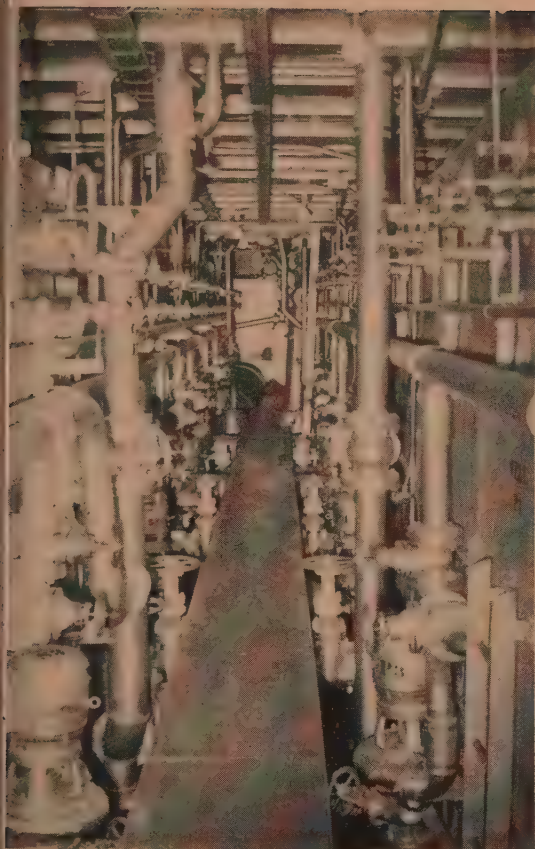
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AIR CRUISERS DIVISION
BELMAR, NEW JERSEY



Model Alley aboard the *Western King* establishes some new standards of convenience in the interests of reducing the cost of maintenance in this vital section of a clipper, where protection against corrosion is paramount.

wells have been protected thus, instead of by galvanizing.

In making the Dimetecote-Amercoat application—which was also applied to the steel upper deck forward, by the way—the metal was sand-blasted to bright steel and then given a coat of Dimetecote, including the prescribed curing process. This was followed by one coat of Amercoat 86, prime; then two coats of Amercoat 33. The second of these coats was white on the coils and tanks, but green where applied to the deck.

In addition, the forepeak from the main deck to a point below the light load line, all railings, the metal mast, the cap around the exhaust stack and the bait tanks, all received Dimetecote, Amercoat 86 primer and two coats of Amercoat 33. Amercoat 86 primer was applied to all steel in the shaft alley, including bulkheads, and some piping; as well as the engine room handrails.

The materials were supplied by the Pacific Northwest distributors of Amercoat and Dimecote, Sheldon Dunning, Inc., Seattle.

Synthetic rubber coating has also been given an important place in the Petrich approach to reduced maintenance costs, for rubber is used aboard *Western King* in wide applications and formulations.

For example, the interior of the great bait water system piping is rub-

ber-coated; and the pumpcases are similarly protected. Numerous tanks, even the exposed gasoline tank carried on the stern with the fuel supply for the clipper's two power boats, are rubber-coated.

Sea fittings are rubber-coated as defense against the destructive and dangerous deteriorating which can occur at these points of opening in the hull.

Fouling—Bottom painting with International anti-fouling paint has proven thoroughly effective in spite of the excessive tendency of tropical seas to grow whiskers on hulls and worms in them.

Mechanical characteristics—Experience with high speed refrigeration compressors on the *Western Ace* in the Bristol Bay salmon freezer ship trade led to the adoption of very large, heavy-duty compressors for *Western King*. These machines, with their 7½ by 7½" bore and stroke, powered with 60-hp. motors, require only three units for this vessel, ranking with the largest of all American clippers in capacity.

This same inclination toward heavy-duty characteristics is followed in the selection of other mechanical equipment, all the way from bait pumps to the Northern cargo winch.

Arrangement—Obviously, a converted vessel may be expected to present more arrangement problems than



Western King's powerful RCA radiotelephone, "High Seas" model, 150-watt, guards eleven frequencies.

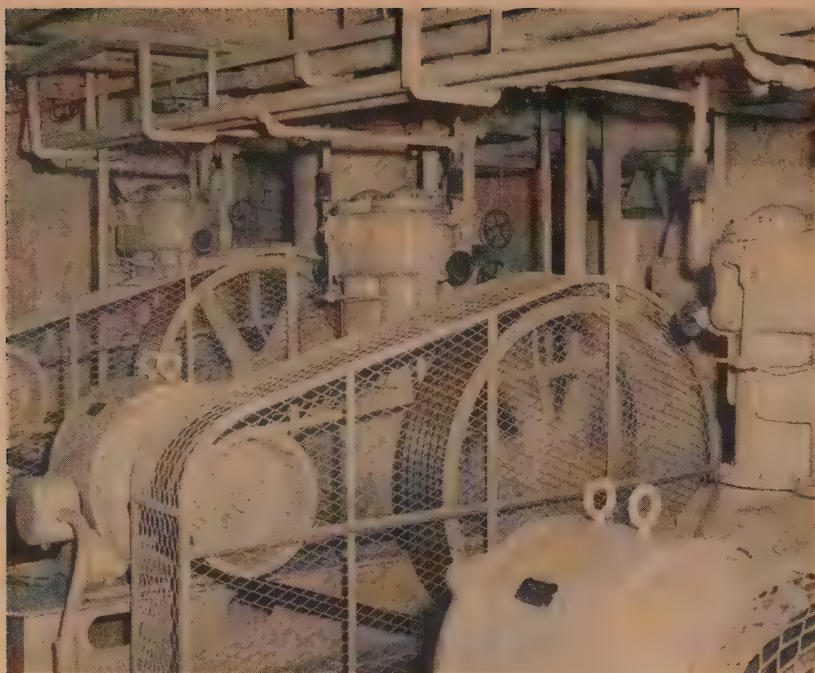


This heavy-duty **Northern** cargo winch is characteristic of the *Western King's* sturdy deck equipment.

a vessel specifically designed and built for the end-use of fishing. However in *Western King* the Petrich family has found ways to overcome these handicaps. As a matter of fact, some say her shaft alley, where so much of a clipper's maintenance cost occurs, is perhaps the most accessible in the fleet. Every consideration has been given to making it possible to reach all units without excessive time demand.

The big bait-water pipeline runs overhead, directly above the shaft, and just below the one catwalk.

Another feature of the shaft alley is the fact that the bait pumps are located there, rather than in the after end of the engineroom, two to starboard and one to port; and all let into bays in the cargo wells giving on the



Refrigeration for the **Western King** is provided by three large, heavy-duty York compressors, twin jobs, with 7½ by 7½" bore and stroke, powered with 60 hp. motors.



Western Fairliner tuna tender for the **Western King**. Chrysler-powered, this utility boat is heavily reinforced to withstand banging against the clipper while being launched at sea.

alley.

One of the pumps, the forward starboard unit, is equipped with a two-speed motor—another of the maintenance-reduction features. En route home, with the cargo spaces full and only a little bait carried for fishing any incidentally-encountered schools, the other two pumps can be cut-out and the one unit reduced to low speed. They last longer that way without overhauling.

An interesting outward feature of the "King" is the fact that the starboard quarter in the way of the bait tank has the house carried out to the rail. This leaves the "alley" available for gear storage and such purposes, instead of being an unused bit of deck for seas to flood and in which fish get sidetracked. "It makes usable space which has gone unused and neglected since American tuna fishing came to be restricted entirely to the port quarter and the horseshoe," said one of her owners by way of explanation. "We think it's an improvement."

The "King's" Men

● Capt. Earl Peterson is in command of *Western King* on her maiden trip as a tuna clipper. He's had the *Western Ace* during much of her fishing career and brought her up to Tacoma this fall for modernization.

In the engineroom the Chief is Ward Weaver, former chief of *Spicewood*, a tuna-transporting freezer ship, and a veteran in the specialized field of these specialized fishing and transporting vessels.

What About Equipment?

● *Western King* carries two *Fairliner* power boats, Chrysler-powered, for utility and bait-getting purposes. They are protected and strengthened by chafing battens against the rough treatment they get when hoisted aboard the clipper in a seaway.

Up in the pilot house is a Sperry magnetic compass pilot, and a pair of Raytheon Fathometers, one for normal navigation requirements and the other for the deep work required in

today's smart tuna fishing, where the skipper wants 1,000-fathom range in his sounding equipment.

Radio shack has two R.C.A. Radiomarine radiophones. One of these is a "High Seas" model, ET-8050 HF, 150-watt, guarding 11 frequencies, and capable of talking direct with either Los Angeles or New York. Thus *Western King* can work the tuna fisheries of either the Pacific or the Atlantic and communicate direct with a principal United States station.

For auxiliary radiophone the *Western King* carries a 100-watt Radiomarine Model ET-8057.

Radar is a Raytheon instrument, specially modified for the requirements of tuna fishing.

The Fairbanks-Morse main diesel turns a three-blade Atlantic type bronze Coolidge wheel, 87 by 50" diameter and pitch.

Commissioning and christening ceremonies for the *Western King* took place at the Craig Shipbuilding Co. yard at Long Beach, Calif., March 17. Sponsor was Mrs. Earl Peterson, wife of the skipper.

Insurance for the "Western" fleet, including the *Western King*, is handled by Marsh & McLennan-Cosgrove & Co., Seattle.

The "King's" Kingdom

● *Western King* will range a wide kingdom. Her first fishing is on the Pacific side, working the Yellowfin banks down near the Equator, and convenient to the Panama Canal. Her load aboard, she'll slip through the Canal, cross the Caribbean, and discharge at Puerto Rico.

Where then?

Can't say as yet. Whether it will be back to the Pacific; or an exploratory venture down the coast of South America; or a try at Caribbean fishing, will be decided when the day comes.

Down Puerto Rico way there are experienced fishermen who believe that the Caribbean and the outer arc of the Windward Islands will be yielding Yellowfin in abundance one of these days. Exploratory fishing by the Fish and Wildlife Service vessel *Oregon* has shown that longlining in the Gulf of Mexico and Caribbean can be quite productive—but clipper men declare bait fishing has never been given a proper trial in those waters.

Will *Western King* give it such a trial?

"Well," Hervey Petrich replies, "We are not passing any bets."

NOTE—The second phase of the present Petrich tuna fleet enterprise, that concerning the conversion of the "Western Ace" from the dual role of a salmon freezer ship and also a tuna clipper, will be discussed in an article in the next issue of this journal.

PACIFIC fisherman's NEWS

Coast States and Canada Take Action To Prohibit Off-Shore Salmon Netting

By April 15 it appeared probable that off-shore netting of salmon would be banned by the states of California, Oregon, and Washington, as well as by Canada and Alaska.

Action by the three states was taken before the deadline of April 15 set by the United States Department of State, when that department was going to ask Congress to enact a law giving the Secretary of Interior power to regulate coastal salmon fisheries.

However, the State Department is putting a bill before Congress to control the fishing activities of U. S. citizens in international waters off the Canadian coast.

Canada has already prohibited net fishing of salmon in the eastern part of the Pacific Ocean as of May 1, 1957. In Alaska prohibitions as to coastal netting of salmon are also in effect.

A bill has been passed in the State of Washington and signed by the governor prohibiting any net fishing in off-shore Washington waters by citizens of Washington. In Oregon both houses of the legislature have passed a similar law and it is awaiting signature of the governor. In California a similar bill has passed the Assembly 64-1 and it was to appear before the state Senate Committee on Fish & Game April 17. Observers felt that the bill had an excellent chance on getting approval of the committee and the State Senate, and being signed by Governor Knight.

Fishing industry observers state that most of the salmon fishermen in the

three states, Alaska and Canada were in favor of the legislation. In California little or no opposition was voiced on the Assembly side.

It was felt in the salmon industry that this legislation will protect immature salmon from uncontrolled fishing, thus preventing depletion of salmon before they spawn. It was felt that the only practical way to control net fishing was to prohibit it so that fish would have a chance to mature.

Beginning May 1, British Columbia fishermen will be prohibited from netting salmon in off-shore waters of the North Pacific, the Canadian Fisheries Department said last month.

This regulation follows recommendations made by Canadian and American fishery representatives at a meeting in Seattle in February.



"Sven! Stop baiting those conveyor hooks!"

California Trollers Off to Slow Start

The California troll salmon season opened April 15, but without any activity.

Fishermen were asking 45c-per-lb. for large cleaned salmon, and 36c per lb. for small cleaned salmon, but dealers were unwilling to meet this price.

However, other factors beside that of price kept fishermen in port, according to Emil Barbara, secretary of the San Francisco Crab Boat Owners Association, whose members are also salmon trollers. These were bad weather, and the Easter holiday.

Mr. Barbara stated that fishermen and dealers were dickering over price and were pretty close together.

No activity was reported out of Bodega Bay, Fort Bragg, or Eureka. These fishermen were evidently waiting for the word on the salmon price from San Francisco.

B. C. Herring Production Lower Than Last Season

British Columbia herring fishermen harvested a total of 179,943 tons of fish during the 1956-57 season, according to the final report of the chief supervisor of fisheries, A. J. Whitmore. This was less than the 253,396 tons produced in 1955-56 season, but slightly more than in the previous season.

As usual, the lower east coast of Vancouver Island was the most prolific district, and it accounted for 43,389 tons.

Herring meal production last season totaled 32,555 tons, and 3,452,762 imperial gallons of oil were produced.

Alaska Fisherman Retires From Lifetime of Fishing

Frank M. Williams, Ketchikan fisherman and veteran seiner in South-eastern Alaska, recently sold his boat *Eleanor*, announced his retirement, and with Mrs. Williams has spent the past month motoring down the coast to California. In early days Mr. Williams recalls using a drag seine and was able to get only ¾c for humpies.

Correction With Apologies

Since inception of the fishermen's indemnity fund for British Columbia in 1953, more than 1,200 vessels have been covered under the plan, and about 50 claims have been paid.

A news item in February issue of PACIFIC FISHERMAN indicated that the number of vessels covered and claims paid was much less than it actually is.

Outfitting Supplies At Terminal Island

Pete Repovich, manager of the California Commercial Fishermen's Association at Terminal Island, reports that the office-store on the Island has a large stock of Douglas Fir trolling poles. The staff is ready at any time to help albacore fishermen and salmon trollers outfit their boats for the coming season.

MURPHY DIESEL "Stars" Again

in low fuel consumption

★ Take it from Capt. J. Eilertsen, skipper of the OCEAN STAR . . . Murphy Diesels are "star" performers when it comes to economical operation.

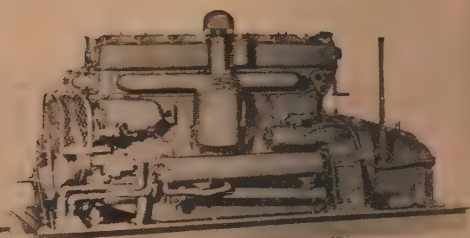
"On one 23-day trip," says Capt. Eilertsen, "our total fuel consumption was 1200 gallons, including auxiliary and stove oil. Our lubrication consumption is one quart in 24 hours. We get 9½ knots at running speed of 1125 rpm."

And when Capt. Eilertsen says, "My Murphy sure is a good, dependable engine," he's speaking the sentiments of Murphy Diesel owners everywhere.

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Many Boats Change Hands at Moss Landing

The troller *Western Skies* owned by Bill Anderson of Edmonds, Wash., has been purchased by Trygve Hamlot of Cupertino, Calif., and will be taken to Moss Landing and outfitted for the season. Francis Furber, who lost his troller *Patricia* off the rocks at Point Reyes last year, bought Mr. Hamlot's former boat, *Marie H.*

Another new owner in Moss Landing is Jim Brandenburg, who recently purchased the *Aquarius* from Paul Renard.

More changes of ownership at Moss Landing include: Joe Andrade's *Sea Bird* sold to Alva Davis of Salinas, and the *Inez D.*, owned by George Van Syckel and purchased by Joseph and Irene Cooke of Carmichael. Ole Beck is the new owner of Leonard Shirrell's *Sea Star*. Mr. Shirrell purchased the *Dorothy Belle* from David Danbom.



Long-Time Tuna Trio in San Diego's tuna industry: left, Frank Medina, captain of the *Evelyn R*; Eddie Ghio, now associated with Van Camp's San Diego cannery and formerly secretary of the American Tunaboat Association; right, Manuel Silva, skipper of the *Coimbra*. The *Evelyn* and *Coimbra* fish for Van Camp.

SAN DIEGO BITE-SIZE ITEMS

Gilbert Van Camp, Jr., has confirmed that his company now owns the research boat, the *America*, built on a YP hull. . . . The *Chicken of the Sea*, formerly the *White Star*, now is under new management and re-named the *Good Hope*. . . . Joe Parisi of San Diego has transferred his *Empress*, built in 1926 at Gig Harbor, to Mexican registry. . . . The sleek *Antoinette B.* is now under management of Richard W. Joseph of San Diego. Edw. Madruga controlled the vessel formerly.

Two other ownership changes: *Elena* from D. J. Callian to W. H. Babcock of San Diego. . . . *Sun Hilarita* conveyed by Virgilia de Paixao, Jr., to Vito Romani of San Diego.

Mary Lou participated in a tuna tagging cruise, working with the Scripps

Institution of Oceanography. . . . The *Paramount*, captained by Joe Madruga, completed a three month cruise carrying photographers for filming of marlin fishing for the movie "Old Man and the Sea." This vessel also participated in filming the "Naked Sea."

SANTA MARGARITA, John E. Leanders, is reported to have received a loan which will pay for modernization work done on the 104-foot tuna clipper . . . Joe Penacho, at the same time, was granted a loan through the Department of the Interior, for refinancing debts on the *Leona C*, but she was lost recently while fishing on the high seas off South America . . . Mr. Penacho has reported that upkeep on a boat such as the *Leona C* ran around \$20,000 a year . . .

Alaska \$5 Fee Dropped

Salmon net fishermen in Alaska will not be required to pay the customary five-dollar fee in 1957, announced Ross L. Leffler, assistant secretary of the interior on April 11. Fishermen will be required to have special commercial fishing licenses, however. This new regulation separates the registration of fishermen from registration of boats and gear.

Insurance Plan in Effect For B. C. Fishermen

Although they won't be drawing benefits before next January 1, British Columbia fishermen now have an unemployment insurance plan in effect.

About 50,000 fishermen on both coasts of Canada, on lakes and rivers are covered by the new federal plan which became effective April 1, after many years of controversy and study.

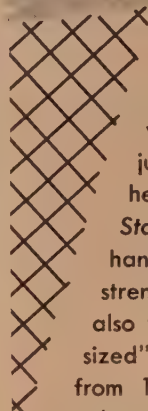
One of the principal obstacles to insurance for fishermen in the past has been that only about 7% actually work for wages. Most of the Canadian fishermen are self-employed or work on a share-the-catch basis with others. This point was circumvented by naming the buyer of the fisherman's catch as the employer, for purposes of insurance. A fisherman who has no employer will have his contribution to the fund deducted from his sale price of fish. And the buyer will have to keep the records.

Fishermen qualifying for benefits will be able to draw them only during the period of January 1-April 15. The benefit rates for fishermen will be scaled up and down depending on their weekly earnings, on the same basis as those in other occupations.

For those without dependents, the benefits will range from a low of \$5 to a high of \$23 a week. Fishermen with dependents will be able to draw between \$8 and \$30 a week.

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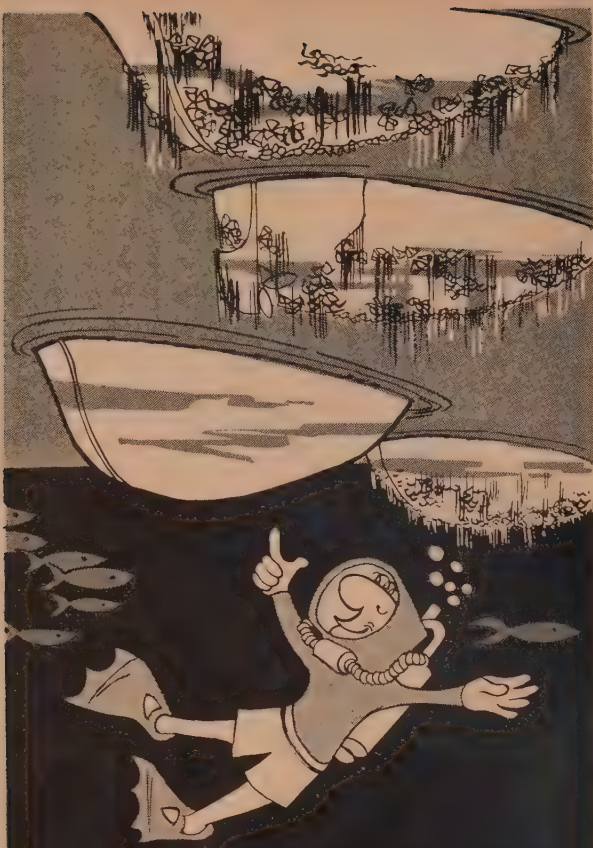


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A Tale of Tuna Clippers

The accompanying picture brought back many memories of the days of World War II, when tuna clippers served as cargo vessels to Hawaii and the South Pacific.

Some of the boats, such as the *Sun Victoria*, known in the War as *Victoria*, built by Campbell Machine Company, went directly from fishing to war. Many other vessels, classified as YPS, were built in Pacific Coast yards and converted to tuna bait boats, after the war.

Such boats later converted for fishing included the *White Sea*, *Ocean Pride*, *Mariner*, *Sonya*, *High Seas*, *Cape Falcon*, *Sun Pacific*, *Sun Dora*, *Ronnie S.*, *Hornet*, *Margiere Pearl*, *Sun Dawn*, *Corsair*, *Leona C.*, *Gem of the Sea*, *Alphecca*, *Intrepid*, *Del Sur*, *Helen Ann*, *Martin B.*, *Supreme* and *St. Matthew*. Most, if not all, of the conversion work was accomplished in Southern California shipyards.

Clarence Gonsalves, talking about the days in the South Pacific, with the *Victoria* in mind, said the 145-foot boat was one of those known as the pork chop express. He said, "We carried meat and vegetables from Pearl Harbor all over the central Pacific. We ran to Midway, French Frigate Shoals and Canton Islands."

Victoria and her sister tuna boats were armed, but skippers and crews didn't take the guns seriously, Gonsalves said. "We were so slow that almost anything could have caught up with us and sunk us from long range."

Captain Manuel H. Freitas, also a skipper of the *Victoria*, recalls the days of Midway battle when the clippers *Yankee* and *Queen Mary*, as well as the *Victoria*, waited to load fish holds with food. Instead, the decks were filed with drums, as well as the bait tanks, which the crews later learned contained aviation gas. Boats left, with 13 PT boats, from Pearl Harbor for Midway, thinking that the PTs were escorts. After the clippers



Left to right, Joe Medina, Ed Varley, Clarence Gonsalves and Matt Monise discuss the days when many of the tuna fleet of San Diego went to war, World War II. When the now-named *Sun Victoria* served in the "Yippee fleet", she was called the *Victoria*.

unloaded their cargo, one of the officers on the PT boat said "Start steaming . . . put some miles between you and Midway. This place is going to get hot." And the next day the Battle of Midway began.

The *Queen Mary* was skippered by George Reeves, the *Yankee* by a San Pedro fisherman.

Among the clippers that never came back from the war were the *Endeavor* and *Prospect*. While the *Endeavor*, with a navy tug, was making a routine 20-mile run from Tulagi on Florida Island to Guadalcanal, Japanese destroyers came upon them and the *Endeavor* burned and sank. She was under the command of Chris Rasmussen, who now has the clipper *Conte Savoia*.

The *Prospect*, and the *Challenger*, were also victims in the Guadalcanal area. The story of the shelling has been recalled many times by Captain Joaquin Theodore.

Altogether about 12 clippers were destroyed by storms, mines and shell-fire. The *Yankee* disappeared with the complete crew. The *Triumfo* hit a mine at French Frigate Shoals, and there was nothing to mark where the ship had been, except driftwood.

The first *Paramount*, under command of Edward Madruga, spent more than three years carrying cargo in the South Pacific, including delivering Christmas dinners to the Marines on Guadalcanal. Madruga later

took over command of a Navy tug, and when he arrived at Okinawa on a salvage job, he found the "first" *Paramount* on the beach. She had been rammed by a big transport which had gone ashore and crashed into the stern of the *Paramount* where the depth charges were stored. Madruga retrieved the name plate of the *Paramount* and has it as a souvenir in his home in San Diego.

In May, 1945, Pacific Motor Boat, now PACIFIC WORK BOAT, carried a very comprehensive story on the construction on the Pacific Coast of 30 128-foot Navy YP vessels, used for patrolling and as refrigerated cargo ships. Design agent for the NEW vessels, 128-footers, was Harbor Boat Building Company of Terminal Island. Construction was of wood, and the tuna clipper *Madeiraense*, built by Harbor Boat, served as a model for the boats.

Bong Johnson Dies Of Heart Attack

A heart attack took the life of Bong Johnson in late March. He was the owner of the *Alert* and was highly regarded for many years up and down the coast. Mr. Bong was born in Norway and had fished with fleets in Astoria, Oregon, and Ketchikan, Alaska, before joining the California fleet. At the time of his death he was located in Oakland.

SCOPE and SOUNDER

Monthly digest of present-day pioneering methods and equipment in world fisheries.

By PETRALE



Live box at downstream end of pontooned fishing screen on north fork of Santiam River is raised to count recoveries of young fall chinook salmon released at the Big Cliff dam, about 4 miles upstream. Battery of 8 screens is being used in investigations into survival rates of young salmon released through dam's turbines and spillways as against rate of control group released from bridge downriver from the dam.

Dam Studies May Help Young Salmon

Fishways to pass mature salmon around power dams with varying degrees of efficiency, have been in operation for a number of years; however, the problem of passing their young over the dams on their seaward migration has not yet been solved. Each dam extracts a toll from the migrants in its turbines and spillways.

One of a number of fishway studies attempting to solve this problem is being conducted by the Washington Department of Fisheries under a U. S. Army Corps of Engineers contract. The investigation is being carried out at Big Cliff dam, located on the north fork of the Santiam River in Oregon, southeast of Salem.

The experiment at Big Cliff is an extension of mortality tests initiated by the department in 1955 at McNary dam on the Columbia River. Because its height and turbines are similar to those at McNary and the recovery of marked fish used in the experiments is much greater owing to lesser water flows, Big Cliff was considered an excellent site.

During 1957 about 180,000 young salmon, including 80,000 spring chinook yearlings and 100,000 fall chinook fingerlings will be used. The salmon are being marked by tattooing in different colors at the Marion Forks salmon hatchery of the Oregon Fish Commission, about 40 miles upstream from the dam. Separate groups have been released in the spillways and turbines and their survival compared with that of others liberated below the dam.

The tattooed fish are recovered in a series of eight pontoon fishing nets (See photo) anchored four to six miles downstream.

Biologists Dale Schoeneman and Richard Birtchet, who are directing the study, report that the high percentage of recoveries are adding valuable knowledge to the problem of getting salmon migrants past dams of moderate height.

A complete report on the findings of the investigation will be published by the Corps of Engineers.

Unique Fish Meal Drier

A unique fish-meal drier is now being used by staff members of the

U. S. Fish and Wildlife Service Technological Laboratory in Seattle. The drier, designed and built by laboratory personnel produces commercial meal on a small scale under carefully controlled conditions. The unit is compact and portable and designed so that the operator has complete knowledge of the conditions inside the drier during each step of processing.

The drier consists of a (1) rotating inner drum, with parallel vanes to distribute and tumble the meal while drying; (2) a stationary drum or housing to confine and direct the hot gasses around the rotating drum; (3) a nozzle-type gas burner as a heat source; and (4) accessories—drum motor, exhaust fan, thermocouples, and air ducts. The unit is 60 inches long and 24 inches in diameter, with the inner rotating drum 30 inches long by 12 inches in diameter. Press cake is dried within about an hour's time in batches. Four to five pounds of meal are dried per batch. The temperature within the drier can be maintained within 3° F at a predetermined setting. The temperature is adjusted by manual manipulation of the gas flow by means of an indexed needle valve.

The meals produced by the experimental drier are being studied by means of animal feeding tests and chemical assays in a collaborative program between the Fish and Wildlife Service, the University of California, and the University of Wisconsin to determine their relative nutritional qualities. By learning which factors are responsible for differences in quality, a big step will be taken toward the solution of the problem of producing fish meals of uniform quality.

Young King Salmon Mature, Spawn and Survive

That all adult Pacific salmon die shortly after spawning is well known fact. A more puzzling and interesting aspect of the King Salmon has recently been investigated by a Stanford University scientist, O. H. Robertson. Results of studies carried out by this investigator and published in *The California Fish and Game Journal* show a small percentage of young male King Salmon (less than a year old) mature prematurely, spawn and survive. The young male King Salmon which matures may be no more than six inches long and have testes which represent nearly 20 percent of the body weight. In examination of certain broods as high as 2 to 3 percent of the fish were shown to be precocious when 120 tests of maturity were made by fertilizing the eggs of adult females with the milk of the mature young. The eggs hatched and



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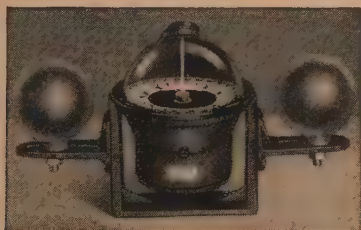
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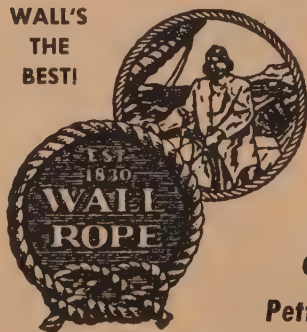
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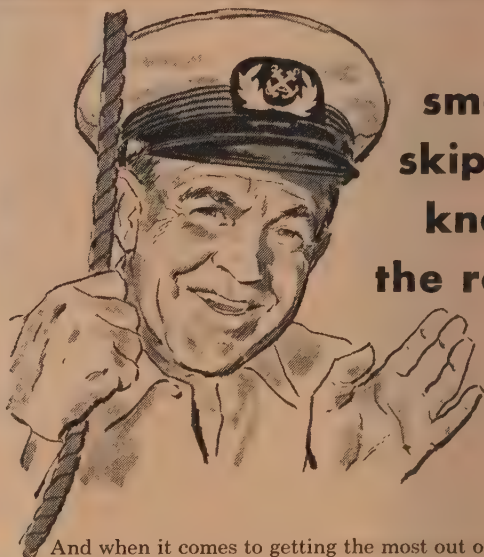
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the young salmon developed normally. A portion of the precocious males were artificially spawned. At the end of five months most of the spent males were alive and growing as well as the controls. The investigator concluded that age was the deciding factor in death or survival of the Pacific Salmon after spawning.

Three-Phase Boundary Traced for Albacore

Albacore, so POFI research finds, are definitely limited in their Pacific migrations by a three-phase fence, erected on food and temperature. The research vessels *Manning* and *Gilbert*, directed by the Pacific Oceanic Fishery Investigations headquarters at Honolulu, in the past couple of seasons have traced these boundaries with some certainty—or at least have learned what the boundaries are. To trace them is difficult, for they move from year to year, and seasonally within the years.

Water colder than 57 degrees has no appeal to the Albacore. In hundreds of miles of experimental fishing, temperature-taking and water sampling, the crews of these vessels could find no Albacore on the cold side of the "isotherm"—the meandering, unstable line along which the temperature is 57 degrees.

Likewise, the researchers verified information that the Albacore stays above the "thermocline", an imaginary sheet which separates the warm waters of the surface from the very cold waters below. The thermocline is sometimes only a few feet down and sometimes 200 feet or more below the surface.

The third limit to the distribution of Albacore—the "food boundary"—is the barren water where few of the microscopic animals which are the basis for fish food exist. This boundary can sometimes be recognized by the color of the water and sometimes only by scrutinizing samples of the water with a microscope.

King Crab Research In Alaska

Progress in studies by the Alaska Department of Fisheries on King Crab research were recently reviewed in the 1955 annual report of this department by H. R. Stevens, Jr. The growing importance of this fishery in the Kodiak area is indicated from earnings of \$200,000 by local crab fishermen in 1955. The rapid rise in the fishery has beset the industry with the familiar question: "How big an annual yield will the crab stocks in the area sustain." The Alaska Department of Fisheries on the request of the industries has been actively en-



For five years in the slugging, slogging of a Canadian combination halibut boat, otter trawler and herring seiner the *Alaska Queen* has proven herself a high-liner, earning her living and those of her owner, Capt. Lars Soloway, and his crew. She's a 75-footer, 20.9 ft. in the beam, and can carry 125 tons of herring in her hold. Her power is a 320-hp. Caterpillar swinging a 60 by 43" Coolidge Pacific-type wheel at 400 rpm. on 3:1 reduction. This gives her a full 10 knots, loaded. Dependability is a prime consideration in this vessel's kind of business, and Captain Soloway is proud of the record of his diesel in this regard. In five seasons the "mill" has ground out 10,000 hours of operation, and of those years and the engine Captain Soloway says: "It's earned very good money for me, and hasn't cost me a cent."

gaged in attempting to establish levels of fishing intensity which will provide the highest sustained catch.

The investigators feel that the fishery is now getting on several distinct populations. To answer some of these questions studies currently in progress include an evaluation of the size, weight, and growth rates of King crab captured in various areas. A tagging program is also being made, principally in Marmot Bay and Alitah Bay where the majority of the crabs are caught. Of 308 males and 803 female crabs released in these areas a total of 14 males and 67 females were recovered. An interesting observation made on the growth of tagged crab was the much faster growth rate for male King crab than for female. This is reversed from that normally observed in the growth of most marine fishes where the female almost always grows faster and to a larger size than the male.

Oyster "Float Culture" Has Future Possibilities

Although the commercial fisheries on the Pacific coast will continue to depend on Japan as a source of oyster seed, Dr. D. B. Quayle, provincial fisheries biologist, has high hopes for the "float culture" technique and believes that it will bring about important improvements in the industry.

Expansion of the float culture prin-

ciple will greatly reduce space required by the industry and expedite the growing season. The grower suspends mother shells on wires from floats in a comparatively small water area and "baby" oysters attach themselves to each shell.

Clinton Peltier Buys California Research Vessel

The *Yellowfin*, California Department of Fish & Game research vessel, was bought last month by Clinton Peltier, Redding lumberman, for \$59,555.55.

Mr. Peltier's bid was the highest among eight opened by the Department. Lowest was \$1,503. Mr. Peltier told department representatives he plans to use the boat to cruise timber holdings in Central and South America, taking along his family of nine children.

Built in 1943 by the Army, the *Yellowfin* was purchased as war surplus in 1949. It has been used mostly for sardine and mackerel research.

The department will acquire use of and recondition a federally owned ship, the *Alaska*, to replace the *Yellowfin*.

Boat Ships Naud Steerer

Bernard Hansen's halibut boat "McKinley" has been equipped with a Naud pneumatic power steering system for greater maneuverability.

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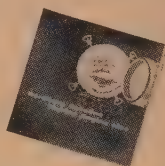
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SAN PEDRO SEINE SETS

JACK STANOVICH, 49, owner of the Pioneer Fisheries in San Pedro, died at his home in late March. He was born in Astoria and moved to San Pedro in 1922. . . . *Anthony M* was reported in a collision with the bait boat *American Lady* off the tip of Baja California. One crewman was injured and taken to port by a Coast Guard plane from San Diego. . . . From the net of the *Russo Bros.*, early in the morning when the crew was washing the net, came a 3-pound salmon, a great rarity in San Pedro waters. . . . Frank Piraino, retired fisherman, who formerly owned and operated the *Bella Marie*, died in late March. He leaves his widow and six children.

CHARLIE BUCHAN, Van Camp Sea Food, has returned to Terminal Island from a survey of cannery installations and fishing fleet facilities in Central and South America. . . . "Legends of the Sea" has been selected as the theme for the 1957 San Pedro Fisherman's Fiesta. Mason Case, chairman for the Fiesta, has announced that Donald B. Steger of Burbank won the contest. Several other people submitted the same idea, but Mr. Steger's entry carried the earliest postmark. . . . The 45-foot abalone boat *Shirley-Kay* was taken in tow in mid-March off Catalina Island, after an all day search when mechanical trouble had developed. . . . Students of San Pedro High School have underway a contest to submit sketches for the lead boat decoration for the Fishermen's Fiesta Boat Parade. . . . Mrs. Louis Kanaster was chairman of the award of the Woman of the Year in San Pedro. Mrs. Anthony Nizetich was chairman of the luncheon at which the award was presented. . . . Renewal of 10-year leases for 10 tenants of the San Pedro municipal fish market occurred in late March.

CHARLES BUCHAN and Harold Relstab are members of the executive committee for the Southern California Marine Radio Council for the next two years. . . . Kenneth Batinovich of San Pedro was one of 43 students on the dean's honor list, Marquette University. . . . The crew of the *Geronimo* brought to Marineland, San Pedro, a pilot whale, said to be the only one in captivity. It was taken off the east end of Santa Catalina Island. . . . The crew of the *Pioneer* recently had a three-hour battle to kill three Manta Rays trapped in the boat's purse seine net off Benedict Island. The battle was successful, with crew using harpoons, knives and axes. Benedict is

a volcanic island. . . . The net boat *Tacoma* of San Pedro, operated by the DiMassa family, has been sold to Tacoma interests. The boat had been with the DiMassa family for 10 years, and Carmen, who took the boat north, fought his way through bad weather to get her to her new port. . . . Don Montgomery has replaced George Nichols in the San Pedro office of the Market News Service, Fish and Wildlife Service.

MASON CASE recently presented trophies to vice pres. Richard M. Nixon, Secy. of the Interior Fred Seaton and Secy. of Labor, James F. Mitchell, each of whom had served as honorary chairman of the Fishermen's Fiesta.

DOROTHY R, operated by Russ Farnell, and built by his father, now deceased, has been granted a loan for about \$20,000 through the Fish and Wildlife Service fund for repair and replacement of fishing vessels. . . . Mr. Farnell is a member of the California Commercial Fishermen's Association of Terminal Island. . . . The wife of Tony Miholovich, skipper of the high-rank tuna purse seiner *Marauder*, was given a stork shower and luncheon recently by members of the Fishermen's Cooperative Association auxiliary. . . . The Auxiliary also conducted a game night, and Mrs. Ted Lucich, whose husband had the *Defiance*, served as chairman. . . . Chris Dragich, 67, cannery worker, and a native of Yugoslavia, died recently in San Pedro. . . . Philip Felando, a member of the fishing industry of San Pedro, was married recently to Thelma Ursich, daughter of Mr. and Mrs. Jack Ursich. Philip is the son of Mr. and Mrs. August Felando.

Yugoslav-American Club soccer players have been active recently with a recent meet with a Santa Barbara team. . . . Army Specialist Third Class, John A. Devlahovich, son of Mr. and Mrs. Andrew Devlahovich, is now a member of the 7th infantry division in Korea. . . . Montgomery Phister, vice president of Van Camp Sea Food Co., Terminal Island, has become a director of the Los Angeles Chamber of Commerce for 1957. . . . Arthur C. Stewart, Union Oil Co. vice president, was nominated also. . . . Retired wholesale fish dealer John Scala and his wife recently celebrated their golden wedding anniversary. . . . Both were born in Borano Ischia, Italy, and they have a daughter, three sons and eight grandchildren.

WM. H. HUTCHISON and Associates recently supplied the *Seven Seas*

with cable purse line, reports Ray Stewart of the firm, which does an extensive business in Mexico. . . . *St. George*, owned by Pancrazio Vuoso of San Pedro, has been transferred to Mexican flag. . . . The boat was built in Tacoma in 1929. . . . *New Home II* has been officially designated as founded by the Bureau of Customs. . . . she was owned by Nick Mardesich. . . . *Santa Lucia*, owned by Louis Di Meglio, home port, San Pedro, has been transferred to the Mexican flag. . . . *Swiftly-Ann*, built in 1944, owner Casmer Malin, is now documented in the port of Los Angeles. . . . she is rated at 145-hp. . . . Albert E. Romero has taken his *Helmur*, 110-hp., out of documentation as a vessel from Los Angeles harbor. . . . and the *Treasure Island*, purse seiner, is now officially transferred by Nicholas Felando to the Salvadorian flag. . . . retired fisherman Josip M. Bozulich died recently at San Pedro. . . . he came to San Pedro 13 years ago from Yugoslavia and leaves a son, Angelo, in San Pedro, and brothers and sisters and three grandchildren. . . . he was 65 years of age.

Frank Iacono, owner of the *Dor-Ann*, recently made a good haul of saury, or needle fish, from a school reported by a scouting plane off Huntington Beach. . . . the fish went to Coast Fisheries, Wilmington, for pet food. . . . Mrs. Jerry Thomas, wife of a long-time purse seine skipper, is the new vice president of Velike Gospe Juniors. . . . many other wives of fishing boat owners and skippers serve in this organization. . . . and another organization in San Pedro have the services of fishermen's wives—the Yugoslav Women's Club, which marked its 25th anniversary recently, now has Mrs. Vincent Laliterna as president. People associated in the fishing industry, directly or indirectly, took part recently in activities to raise funds for a new church for Mary Star of the Sea: Gerald Cigliano, president of Pan Pacific Fisheries; John Calise, union business member; Ralph Galante; and Jennie Puccinelli, widow of the fabulous "Doc" Puccinelli. . . . Dr. Frances Clark, retired as head of the California Fish and Game's laboratory, and recently returned from an extensive trip, received the second honorary membership of the Soroptimists of San Pedro for her community service. . . . Frances Louise Despol and Vince Fiamengo, both of whose parents are associated in the fishing industry activities of San Pedro, are engaged to be married. . . . Donald Loker, vice president of Star-Kist, administered the oath of office to new officers of the Yugoslav-American Club. . . . Joseph Zaninovich is president for the second time. . . .



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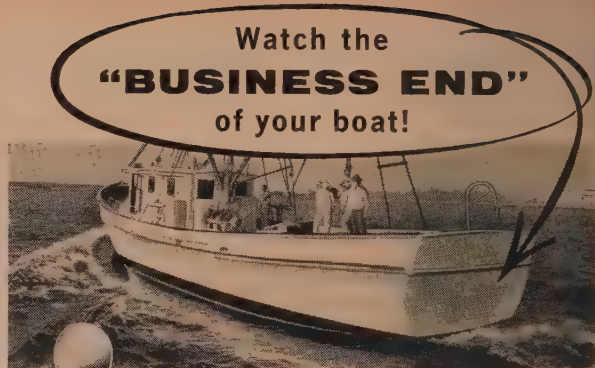
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Hammer New President Of Fishermen's Co-op

Reider Hammer, Seattle, well-known commercial fisherman and skipper of the fishing vessel *Victory*, has become president of the Fishermen's Cooperative Association in Washington for 1957. Hammer succeeds Adam Kanzler, who has sold his boat *Patricia* and retired to life ashore.

Harry McCool was re-elected vice-president and Bert G. Johnston was re-named secretary-treasurer. Thomas A. Bright was named as a new member of the Board of Trustees. Remaining on the board are Dan Hjort, Harold Graham, Kris Kyvik and Henry Parpart.

Headquarters for the Association is at Pier 59, Seattle.

Alaska Fishermen's Union Re-elects Jack Wood

Jack Wood, Bellingham agent of the Alaska Fishermen's Union, defeated Knute E. Jensen in the annual election for that post. This will be Wood's sixth term as agent in Bellingham.

Seattle members of the union elected Henry Gruntman, Arnold Rosvick and Rasmus Mikkellaug to its policy committee. Unopposed for re-election were William Lehto, San Francisco; John Storkersen, Portland, and Oscar Rodine, Bellingham.

Also unopposed were Secy. Treas. George Johansen and Asst. Secy. Treas. Swan Lundberg.

187½ Million Seed Oysters Arrive In Washington

Seventy-five hundred cases of seed oysters arrived at the port of Grays Harbor from Japan last month. Each case held about 25,000 seeds or spat, as they are called in the oyster industry.

Some 6,750 cases will be planted in the Coast Oyster Company's beds in the area, 3,000 at Willapa Harbor and 3,750 on Grays Harbor. An additional 750 cases will be planted at Paulsbo on Puget Sound.

The Coast Oyster Company now produces 125,000 gallons of oysters per year, it is reported, and expects to produce 200,000 gallons by 1959.

Included in the shipment on the freighter *Ariake Maru* was an order of white Japanese clams for experimental purposes. If attempts to grow them are successful, said a company official, it will give a needed boost to the fishing industry in the Grays Harbor area.

Meat of the white clam resembles that of the native little neck clam, the official said.

It will take a year for the venture to prove a success or failure.



BRISK will live up to her name more fully than ever—and that is saying a lot, for she has been a famous fisherman for 33 years—with her new Allis-Chalmers Buda diesel. Capt. Nels Forstad picked a 190-hp. motor, turning a 50 by 43" 5-blade Olympic propeller through a 3.88:1 Capitol reduction gear. *Brisk* is dragging now, but will switch this spring to halibut; and later in the season to Albacore.

Canada to Seek Salmon Pact Covering Fishing Off Alaska

Canada and the U. S. will eventually sign a treaty covering salmon fishing off the coast of Alaska, Canadian Fisheries Minister James Sinclair intimated in an address recently before the annual meeting of the United Fishermen and Allied Workers' Union in Vancouver, B. C.

Mr. Sinclair said that under present conditions American fishermen operating out of Alaska were taking most if not all of the salmon spawned in the Stikine, Taku and a few other rivers located wholly in British Columbia.

"It may be that we will be obliged to adopt the same tactics that induced the Americans to agree to a treaty on Pinks," said Mr. Sinclair, reminding his listeners that it was not until Canadian fishermen went offshore to catch incoming salmon off the west coast of Vancouver Island that the American catch declined in proportion to Canada's and made it seem expedient for an international agreement similar to that long applicable to Sockeye salmon on the Fraser River.

The Canadian minister expressed the hope that the United Nations would endorse Canada's proposal for a 12-mile limit on territorial waters as a means of conserving fisheries resources. He said that nations with large offshore fisheries such as Canada, Norway and Russia favor a 12-mile limit, particularly on the Atlantic.

H. (Steven) Stavenes was re-elected for a third term as president of the union. First vice president is Buck

Suzuki; second vice president, Mrs. Mickey Beagle; business agent, Alex Gordon; secretary-treasurer, Homer Stevens. The executive committee comprises: Reg Payne, Harry Allisom, Elmer McEachern, Hideo Onotera, Pete Jenewein, Alf. Christofferson, Adeline Ratchford, Barney Madsen, Leis Nordahl, Kay Nygren, Pete Pavelich, Erik Likness, Bert Goddard, Jack Cook, Alice Coleman, Ed Bertram.

Weldcraft Building Three Gillnet Boats in Bellingham

Weldcraft Steel & Marine Co., Inc., of Bellingham, Wash., expects to complete three wooden-hulled gillnet boats by the middle of this month. One, a 35-footer, is being built for Earle Jewell. The other two, 32-footers, are being built for Jack Xitco for use in Alaska.

The 32-ft. boats will be powered by 160-hp Redwing engines, the 35-footer by a 155 hp. Chrysler. All will be equipped with Easthope drum and drive assemblies.

Tragedy Strikes Seattle Fisherman

On his first trip with his newly-purchased troller, *Alice M.*, Lloyd W. Born of Seattle, Wash., was lost en route from Seattle to Westport. His body was found later by the Coast Guard on the south tip of San Juan Island. A deflated life raft also was found but no sign of the *Alice M.*

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Sport Gear Forbidden On Commercial Trollers

Oregon last month prohibited the use or presence of sport fishing gear on trollers licensed for commercial fishing.

The new ruling is designed to curb individuals who have been using commercial licenses to take more than the legal limit while sport fishing in coastal waters.

This regulation is not intended to interfere with bona fide commercial trolling, said M. C. James, state fisheries director. Nor is it intended to prevent trollers normally engaged in commercial fishing from being used for charter or guiding purposes when not fishing commercially.

Crew Saved As Boat Sinks Off Panama

The 12-man crew of the bait boat *Helen S.* was rescued when she went down in rough waters off the coast of Panama in late March. They were taken aboard the *Mary Jo*.

Heavy seas opened a seam in the *Helen S.*, it is reported. An hour later the 120-footer sank with 160 tons of tuna aboard. She was of wood construction and fished for the Van Camp Seafood Company.

She was skippered by Anthony Marques of San Diego. Edward Correia was her fish captain. Managing owner was Manuel Simas.

The Harbor Boat & Yacht Company built the *Helen S.* in 1951.

Sealions Steal Halibut From Tagging Scientists

Halibut schooner *Pacific*, chartered to the International Pacific Halibut Commission for tagging work on the Yakuta and W Grounds during the mid-winter period, returned to home base in Seattle after a bitter bout with sea lions.

The schooner personnel reported that the sea lions were exceptionally bad on the W Ground, damaging an estimated 20 per cent of the catch and interfering seriously with tagging.

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California Trollers
Association Formed

Fishermen of Monterey and Moss Landing are being asked to join a new organization recently set up in Oakland named the Central California Trollers Assn. Fishermen of this area have long felt the lack of organization in their ranks. First steps to remedy this situation began when a group met at Evans Radio Dock in Oakland, drew up by-laws and elected officers as follows: Dave Davisson of Sausalito, president; Marvin Hoy of Sausalito, vice-president; Helen Evans, secretary pro-tem. Area representatives are Dave Krueger, Berkeley; Jim Butler and Carroll Wadsworth, Oakland and Alameda; Marvin Hoy, Sausalito and Bob Frederickson, Petaluma and Vallejo.

Purpose of the association is to interest all unorganized fishermen in central California. First business of the group will be to push legislation moving the salmon season ahead to April 15 instead of the May 1 opening and closing two weeks earlier on the other end, September 15, instead of September 30.

Tacoma Scene of Launching

The first large fishing boat launching in Tacoma, Wash., in almost six years took place at the Peterson Boat Building Co. in March. The craft was christened the *Memories* by Joanne Peterson, daughter of George Peterson, builder and owner.

Designed by Mr. Peterson, the new *Memories* measures 57' x 17½', is powered by a 220 hp General Motors Detroit diesel engine with 4½ to 1 GM hydraulic reverse and reduction gear supplied by Evans Engine & Equipment Co., Seattle. Special features include steel bulwarks and mast; a celastic covering and wedged seams throughout.

With crew accommodations for 9, the *Memories* will be captained by Nick Vojkovich of Seattle.

Troller Founders In
Storm Off Grays Harbor

John Nevill of Seattle was taken off his 40-foot troller *Leona W.* just minutes before she went down in deep water five miles north of Grays Harbor during high winds April 14.

Nevill's efforts to inflate a life raft failed and he clung to the bow of his sinking vessel for 45 minutes until rescued by the troller *Rose Marie* out of Grays Harbor.

Ted Aaker Dies
From Heart Attack

The many friends of Otelius "Ted" Aaker, 63, well known Fort Bragg, Calif., fisherman and community leader, were shocked to learn of his death from a heart attack last month.

A veteran of the U. S. Army, World War I, Mr. Aaker had been active in the promotion of Noyo Harbor ever since his arrival in Fort Bragg about 20 years ago. He had served five years as a member of the Noyo Harbor Commission and was a member of the Coast Guard Auxiliary.

Mr. Aaker was stricken while working on his trawler *Northern Light*, was rushed to the hospital, but was pronounced dead upon arrival.

He leaves his wife Ida, Fort Bragg, and two daughters, Doris Aaker, Sacramento, and Mrs. Irene Daglia, Stockton.

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"Tacoma" Has New Owner

The purse seiner *Tacoma*, owned and operated by Carmen DiMassa, San Pedro, has been sold to Harold Hansen, Seattle.

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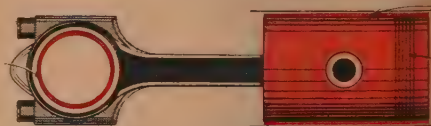
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Inspection of M/V New Holiday's 200-h.p. GMC diesel after two years' operation on RPM DELO Oil showed no carbon build-up, sludge or deposits of any kind. The 47½-foot, all-steel sport fishing cruiser operates daily charter trips out of San Francisco's Fisherman's Wharf. Fred Morini, owner and skipper of the vessel, says, "I know from experience RPM DELO Oil will keep this engine in top condition; it kept the engine in my previous boat trouble-free. When you're 30 miles beyond the Golden Gate you can't risk an engine breakdown. That's why I rely on RPM DELO Oil."

Why RPM DELO Oils reduce wear—prolong engine life



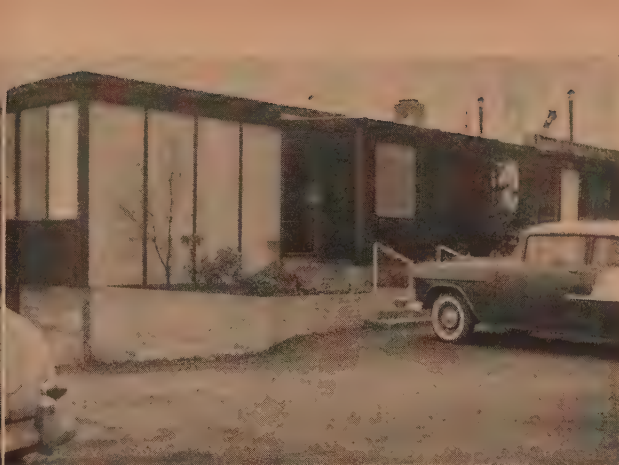
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Whitney & Co.'s modern structure stands two stories at dock level, one story at street level. Full-length basement holds supplies and fishing gear. Note wide dock in foreground. At left, street level view, with driveway at left leading to dock at rear.

New, Modern Trend in Fishery Headquarters

Outstanding among fishery company headquarters are the new offices of the Whitney & Co. and associated enterprises on the north shore of Lake Union.

Said Sam Rubinstein, president of Whitney & Co., "When operation of our firms was centralized we found additional office and moorage facilities necessary. So, with comfort and simplicity of construction the foremost requirements, we built our present offices."

Built on a 120-foot deep water frontage, the low, sweeping structure stands one story at street level and two stories at lake level. The full-length, dock level basement is used for storing supplies and making minor repairs to equipment.

Handsome, well-lighted offices on the upper level all are air conditioned. Firms occupying the new offices are Whitney & Co., market-agency for canned salmon and other fishery products, which also owns and operates the freezer ship, *Reefer King*; the Farwest Wrangell Co.; Farwest Fishermen, Inc., and the Seldovia Bay Packing Co.

Protected by a bulkhead of steel sheet piling, the frontage has moorage space and a wharf at one side for the companies floating equipment in the off-season.

Former offices of these firms were in the Central Building. Their new business address is 1455 Northlake Place, Seattle 3, Wash.

Typical of light, airy offices in Whitney's new headquarters is that of Pres. Sam Rubinstein. Windows overlook company's moorage in Lake Union.



Pleasant, ultra modern reception room. Here W. D. Suryan, manager of the *Reefer King*, confers with Comptroller J. G. Gardiner.



Part of Whitney & Co.'s moorage looking shoreward. Office building in background. Large vessel partly visible at left is the freezership *Reefer King*.

Fisheries Technologists Hold Annual Meeting

By Harry R. Beard



• The 8th Annual Conference of the Pacific Fisheries Technologists was held at the Chinook Hotel in Yakima March 24th through the 27th. Active participants totaled 74 from Alaska, northern and southern British Columbia, the 3 Pacific Coast states and Hawaii. Also included were representatives from the Washington offices of the Fish and Wildlife Service, the National Fisheries Institute and several eastern universities and industrial concerns.

Sessions were held under the chairmanship of the President, Dr. G. Ivor Jones of the National Canners Association, Northwest Branch, assisted by the Secretary, Dr. Joseph A. Stern of the Technological Section of the University of Washington, School of Fisheries.

• The first session of the conference, "General Technological Investigations," was held under the chairmanship of Max Loewe, Laboratory Director, Star-Kist Foods, Inc., Terminal Island, California. Eight papers were presented dealing with fish spoilage and its determination, color problems and measurement in canned salmon and research on tuna canning. In addition, two other papers were presented.

J. A. Dassow of the Fishery Technological Laboratory, Fish and Wildlife Service, Seattle, outlined research in progress and planned for the tuna industry. Their primary interest is to improve quality and they already are actively engaged in studies that it is hoped will help accomplish this objective. They hope to set up a field station in California and have two men there to work closely with the tuna industry on various problems. As a part of this work, A. L. Tappel, Department of Food Technology, University of California, reported on "Pigments of Tuna." This research has uncovered much valuable information on the nature of the pigments causing various colors and color changes in canned tuna. Further research could lead to methods of improving color, or at least, in lessening development of undesirable color changes.

• The 2nd and 3d sessions were titled: "New Methods and Techniques

of Fish Preservation" and a panel discussion on "Commercial Use of Refrigerated Brine for the Preservation of Fresh Fish." In reality, the two sessions were different aspects of the same general subject. Hugh L. A. Tarr, Director, Technological Station, Fisheries Research Board of Canada, Vancouver, was chairman of the first session. The members of the panel for the second session were: Carl A. Anderson, Manager, Western Engineers, Inc.; L. P. Callahan, Laboratory Manager, Libby, McNeill and Libby, Salmon Division; H. G. Cheyne, Personnel Manager, Alaska Packers Association; and H. G. Heaton, Vice President, Farwest Wrangell Co., Inc., all from Seattle.

The Fisheries Research Board of Canada and the Fisheries School of the University of Washington reported their latest research on the use of antibiotics in preserving salmon for canning. American Cyanamid Company and Chas. Pfizer and Co. both outlined the merits of their own particular antibiotic and the progress of their efforts with the Food and Drug Administration to permit use of antibiotics in fish preservation. Both speakers were optimistic for eventual clearance. All papers presented confirmed earlier reports on the increased length of time fish may be kept in good condition by the use of very small concentrations of Chlortetracycline (aureomycin) and Oxytetracycline in the ice or chilled sea water used on the fish.

Panel members described the chilled sea water units their respective companies have and the results obtained from their use. All agreed that chilled sea water refrigeration filled an urgent need in the salmon canning industry, enabling salmon to be kept in good canning condition for 4 to 6 days and longer if salmon just from the water were handled. Chairman for the panel discussion was George M. Pigott, Chemical Engineer, National Canners Association, Northwest Branch, Seattle.

• At the luncheon March 27th, C. Clifford Byrd, National Fisheries Institute, Technological Division, Washington, D. C., reported on the Atlantic Fisheries Technologists Conference

at Williamsburg, Virginia, in February. This group is similar to the Western group, having been patterned after it. However, this was their first important conference but a very successful one.

• The membership again this year had an opportunity to become further acquainted with the very important research on fish meals and oils financed by Saltonstall-Kennedy funds and of results obtained to the present date. This work is under the direction of Maurice E. Stansby, Chief, Pacific Coast and Alaska Technological Research, Fish and Wildlife Service, Seattle, who also was chairman of the session on this subject at the conference. For the most part, this is basic research aimed at such fundamental information as the structure of fish oils, chemical reactions in fish oils and the nature of objectionable odors in fish oils. Adequate knowledge of these subjects ultimately should lead to new uses for fish oils or products that can be obtained, or be made, from them. In addition, research also is underway on the use of derivatives of fish oil for various purposes including sprays for citrus fruits and in ore flotation. Very promising results already have been obtained.

Basic research also is being carried out on fish meal proteins, on the unknown growth factors in fish meal and on the use of antioxidants to inhibit oxidative rancidity in fish oils and oils in fish meals. Reports were made on all these projects.

The availability of Saltonstall-Kennedy funds has enabled the Fish and Wildlife to retain nationally recognized authorities in their respective fields to direct the various research projects. Included are: W. O. Lundberg, Hormel Institute, University of Minnesota; H. S. Olcott, Institute of Marine Resources, University of California; A. L. Tappel, Food Technology Department, University of California; S. R. B. Cooke, School of Mines and Metallurgy, University of Minnesota; H. R. Bird, Poultry Husbandry Department, University of Wisconsin; and B. Lindholm and C. R. Grau, Poultry Husbandry Department, University of California.

• "Standards, New Products and Mar-

keting" was the subject for the last session with John A. Darsow of the Fishery Technological Laboratory, Fish and Wildlife Service, Seattle, as chairman. Mr. P. A. Sunderland, B. C. Packers, Ltd., Vancouver, discussed development of new products in the fisheries. Other than this subject, the morning was given over to standards. J. H. Holston, Assistant Chief, Technology Section of the Fish and Wildlife Service, had come from Washington to attend the conference and to acquaint the membership with the Fish and Wildlife Service's plans for Voluntary Standards for fishery products. Voluntary Standards already are in effect for fish sticks and in process of development for frozen fish blocks. Max Patashnik of the Seattle Laboratory then outlined research in progress on the West Coast towards development of Voluntary Standards for such products as frozen fillets and steaks.

The conference ended with a round table discussion of "Food and Drug Standards for Canned Tuna" by a panel consisting of William S. Hamm, Laboratory Director, Westgate-California Tuna Packing Co., San Diego; George W. Courtney, Process Engineer, Van Camp Sea Food Co., Inc., Terminal Island, California, and Max Loewe, Laboratory Director, Star-Kist Foods, Inc., Terminal Island. The panel members outlined the difficulties and pit-falls they met in developing the tuna standards, interspersed with very helpful advice to salmon cannerymen when their turn comes to develop standards.

The Conference in 1958 will be in British Columbia. The new officers are: President, G. F. Boothby, Research Manager, The Canadian Fishing Co., Ltd., Vancouver, and Secretary-Treasurer, Peter J. Schmidt, Associate Scientist, Fisheries Research Board of Canada, Technological Station, Vancouver. The executive committee is as follows: Alaska, Harry Seagran; British Columbia, David Barbour; Washington, Neva Karrick; Oregon, Al Feather; California, Harold Olcott; and Hawaii, Fritz Jerman.

Alaska Fish Research To Get \$786,500

The Fish and Wildlife Service will allocate \$786,500 for research in Alaska fisheries by June 30, according to Rep. Don Magnuson, Democrat, Washington.

Magnuson said that \$572,600 will be spent for salmon research, \$130,000 for king crab and \$83,900 for herring.

Universities and private research groups will receive \$355,100, Fish and Wildlife scientists \$431,400.

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Commissioner Arnie Suomela Speaks At Chicago NFI Meeting, April 30

"It is a pleasure to attend and to represent the office of Commissioner of the U. S. Fish and Wildlife Service at your splendid convention. As you know, there has been no Commissioner of Fisheries since the former Bureau of Fisheries was consolidated with the Bureau of Biological Survey in 1940 to form the Fish and Wildlife Service. Your popular and capable general manager, Mr. Jackson, probably will recall those days when he was Assistant and frequently Acting Commissioner of Fisheries. Your chairman has asked that I speak to you briefly on the status of the reorganization of the Fish and Wildlife Service and what that will mean to you.

"As you know, the Congress, in passing the Fish and Wildlife Act of 1956 promulgated for the first time in our history, a comprehensive national program on fish and wildlife resources. The Congress also authorized the reorganization of former Fish and Wildlife Service so as to provide for two separate bureaus within the U. S. Fish and Wildlife Service. It further strengthened the stature of the organization by creating the new post of Assistant Secretary of the Interior for Fish and Wildlife and a Commissioner of Fish and Wildlife, and two bureaus — the Bureau of Commercial Fisheries and the Bureau of Sport Fisheries and Wildlife. Your principal concern, I am sure, will be with the former. The Bureau of Commercial Fisheries is designed to handle the problems arising within the commercial fishing industry, and we intend to use every resource at our disposal to make it the effective service organization you want it to be. As Director and Assistant Director, the Bureau has two capable career administrators, Donald L. McKernan and Andrew W. Anderson, who have demonstrated their knowledge of the commercial fisheries and its optimum management. This new Bureau will have four principal divisions — the Division of Administration, Division of Resource Management, Division of Biological Research, and Division of Industry Research and Service. As yet, the organizational lines have not been fully designed and staff appointments have not yet been made, but I wish to assure you that the organizational lines will be drawn so as to make this Bureau as efficient as possible and the staff appointments will be made from career fishery personnel.

"We hope to make this organization your organization. We want you to know that its doors are open to you at any time and on any matter that legitimately falls within its organizational responsibilities. We have heard it stated by numerous individuals and groups that the fisheries were without representation in the Federal Government and the Commercial Fisheries in particular were relegated to a secondary position in the Washington and international scene. It was the intent of Congress in passing the Fish and Wildlife Service Act that the fisheries have strong representation in the Fed-

eral Government and we intend to carry out these responsibilities to the utmost of our capabilities. In Assistant Secretary Leffler, we have a man who brings to the organization a broad background of industrial and resource management. As you get to know him and his policies, I am confident that you will agree that this organization is under expert guidance. I will pledge my efforts to the office of Commissioner to be of maximum service to you.

"Thank you, Mr. Chairman, for this opportunity to attend and participate in this excellent convention."

Market Value of B. C. Fish Production over \$67 Million

British Columbia's fish and fish products last year represented a marketed value of \$67,500,000, nearly \$7,000,000 more than in the previous year and the fourth highest in the industry's records.

The fishermen's share of this total was \$36,000,000, second highest on record and over \$8,000,000 higher than in 1955, according to statistics recently issued by A. J. Whitmore, chief supervisor of fisheries.

The increases are attributed to several factors. Herring catch was the highest on record and both landed and marketed values exceeded all previous totals. Halibut landings increased by 3,600,000 pounds over the 1955 catch and this, coupled with sharply increased unit prices for halibut, resulted in record prices for both landings and marketings.

Blake A. Campbell, chief fisheries economist in the Pacific area, pointed out that while salmon landings were lowest since 1944, price increases offset the drop in production with the result that both landings and marketings made dollar gains over 1955.

Landings and sales of certain other species such as oysters and fish sold for mink feed also attained record levels.

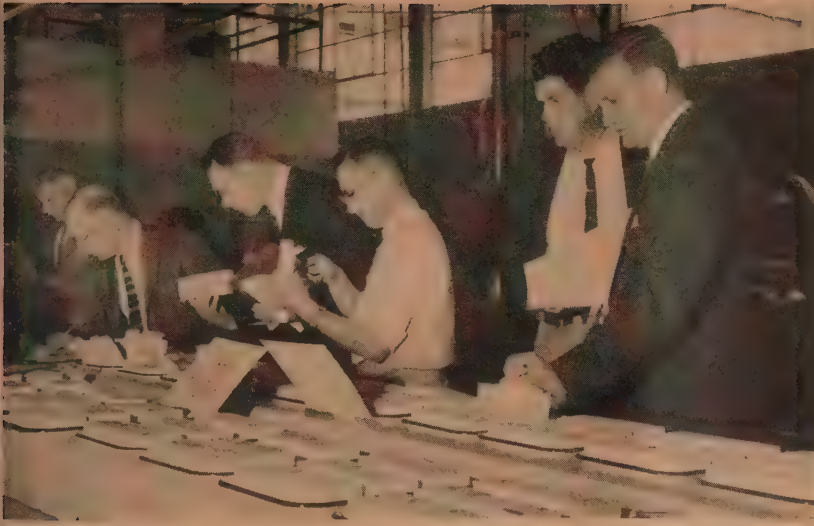
Last year's salmon catch of 113,528,000 pounds brought fishermen

\$21,356,000 and a marketed value of \$44,306,000. Chief production item was the canned pack of 1,118,279 cases which was marketed for \$31,634,000. Combined sales of fresh and frozen salmon products totaled \$11,470,000, with mild cured and other salmon products making up the balance.

A tremendous calendar year herring catch of 245,698 tons maintained this variety as B. C.'s second most valuable fish species in spite of strong competition from halibut. The fishermen's record herring catch value of \$7,077,000 was matched by marketed returns on herring products, principally fish meal and oil, with a total of \$10,660,000.

The catch of halibut by Canadian fishermen on the Pacific coast while not highest on record brought in best monetary returns to both primary operators and processors. Fishermen received \$5,067,000 for the 23,316,000 pounds landed; the marketed value was \$6,636,000, nearly \$700,000 greater than any previous sales figures.

The B. C. trawling fleet contributed substantially to the overall fishery value, one of its chief catch items being landings of 8,303,000 pounds of soles which brought fishermen \$390,000 and when marketed added \$903,000 to the grand total.



Sampling frozen fish products. From left to right, Norman E. Weitkamp, Washington Fish & Oyster Co., Inc., Seattle; M. A. Bornstein, Bornstein Seafood, Inc., Bellingham, Wash.; Thor Copstead, The Cryovac Co., Seattle; David Miyauchi, U. S. Fish and Wildlife Service, Seattle; Jay Hendrickson, Columbia River Packers Association, Astoria, Oregon; Art Woodland, Imperial Cannery, British Columbia Packers, Ltd., Steveston, B. C.

Annual Steak and Fillet Cutting Held in Seattle

The quality committee of the National Fisheries Institute held its annual Northwest steak and fillet cutting in Seattle last month. Fish cut included halibut and salmon steaks and fillets of Pacific perch, rockfish, cod and sole.

Testing of fish products in packers' cold storages and their subsequent quality in retail stores revealed products somewhat superior to last year's. The over-all conclusion: Quality is good and getting better every year.

All Northwest members of the N.

F. I. were present as well as representatives of various Canadian companies and interested persons from the National Fisheries Institute, the Northwest Fisheries Association, The Fish and Wildlife Service and the University of Washington's School of Fisheries.

Mr. Clifford Byrd, N. F. I. member from Washington, D. C., supervised selection of fish products.

Mr. E. A. Ruthford, chairman of the quality committee of the Northwest Fisheries Institute, spoke at the luncheon which preceded the cutting.

Robert J. Schoettler Assigned Saigon Post

Robert J. Schoettler, Seattle, chairman of the International Pacific Salmon Fisheries Commission and former Washington state fisheries director, has received an assignment from the U. S. State Department for overseas service in Viet-Nam.

His appointment by the International Cooperation Administration, a division of the State Department, is fisheries advisor to the U. S. Operations Mission at Saigon.

It will be effective immediately following the May 8-9 meeting of the International Sockeye Commission at Vancouver, B. C.

Schoettler served as director of fisheries for Washington from 1950 until early this year. His membership on

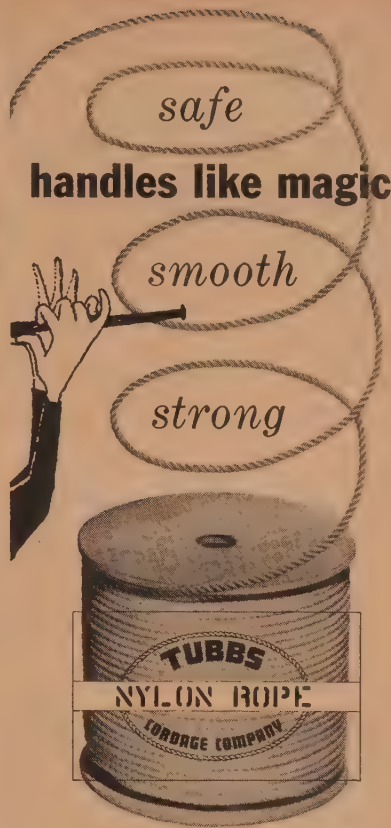
the Sockeye Commission also began in 1950. He has been a member of the advisory committee of the International North Pacific Fisheries Commission since 1953.

Following World War II he held a fisheries advisory assignment with UNRAA at Shanghai.

Stephen Chase, Founder Of Whiz Fish Co., Dies

Retired salmon-packing executive Stephen Chase, 78, died April 16 in Seattle. With his father, Mr. Chase founded the Whiz Fish Co. in Seattle in 1902. Later he founded the Everett Packing Co., which subsequently became the Fishermen's Packing Corp., now located in Anacortes, Wash.

From 1921 until his retirement in 1942 Mr. Chase headed the former International Packing Co. of Seattle.



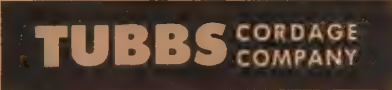
Tubbs Nylon Rope has twice the tensile strength of Manila Rope of the same size, yet is lightweight with excellent working elasticity plus a smooth lustrous surface for easy handling. Rot and mildew resistant, it needs no treatment and can be stored wet.

other Tubbs synthetic ropes

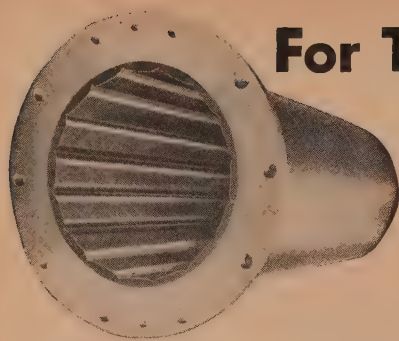
Dacron Rope for excellent resistance to damage from abrasion, sunlight, rotting or marine organisms with an elasticity about half that of nylon rope.

High Tensile Polyethylene for 1½ times the strength of manila rope. Rot resistant, practically non-absorbent, and it floats.

For complete information about Tubbs line of synthetic and natural fiber rope, write Dept. A-5



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Buy them from your favorite Marine Supply House or Ship Repair Yard when you haul out. Large west coast stocks, popular sizes. Factory stock to 11½-inch shaft size available overnight by air.



Tuna clipper Dominator, built by National Steel and Shipbuilding Corp., San Diego, uses Cutless bearings.

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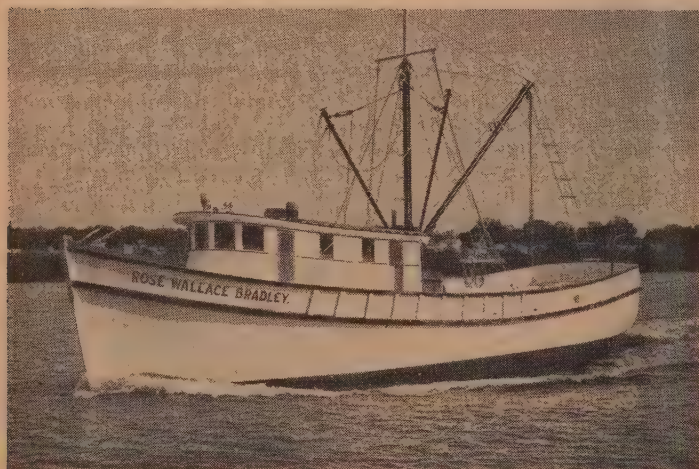
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THIS NEW FLORIDA SHRIMPER USES TOBIN BRONZE SHAFTING



A 3-inch Tobin Bronze Shaft transmits power dependably from a 170-hp diesel in the "Rose Wallace Bradley," recently built by Diesel Engine Sales, St. Augustine, Fla.

Tobin Bronze propeller shafting resists sea water corrosion. It is strong and tough—yet "gives" under sudden jars to lessen the possibility of damage to bearings and housings. It is available through leading distributors of marine supplies. For detailed information, see your distributor or write: The American Brass Co., Waterbury 20, Conn.

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*Reg. U.S. Pat. Off. 57116PF



FOR MOST APPLICATIONS. Here's why Tobin Bronze*, an exclusive Anaconda product, has for 70 years been first choice of boatbuilders and boatowners for dependable propeller shafting.

It is manufactured by special rolling processes which impart to this time-tested alloy an unusual combination of tensile strength, fatigue resistance, toughness, and high yield strength.

FOR HIGH SPEED, HEAVY DUTY. Tempaloy* Shafting is a popular companion of Tobin Bronze. This corrosion-resistant aluminum bronze combines exceptional strength and toughness with high resistance to shock, and is used for high speed and heavy duty work which requires maximum shaft strength and toughness with comparatively light weight.

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MARINE BRASS AND BRONZE

PACIFIC FISHERMAN May 1957



Can Cutting Committee—Dr. Sven Lassen, George Courtney, Van Camp; Donald White, NCA, Berkeley; Wm. Hamm, Breast O' Chicken, Inc.; Max Loewe, Star-Kist; Dr. Lionel Farbel, Hooper Foundation, Berkeley.

TUNA CUTTING

Most Gratifying

Annual tuna cutting, at Long Beach, Calif., April 19, attended by several hundred people, was the most successful yet held of the event jointly sponsored by the California Fish Canners Association and National Cannery Association.

On display, for inspection by cannery personnel and the cutting committee, headed by Dr. Sven Lassen, were 156 samples of all styles of canned tuna. In all 300 cans were cut. In addition fisheries products from South America, Japan, Portu-

From the top—Gene Brockman, Continental Can Co.; Chas. Morrison and Farrell Stone, U. S. Dept. of Agriculture.



Albert Vignola, West Coast Packing Corp.; George Dew and Harold Requa, Jr., Breast O'Chicken, Inc.



Lower Picture, from left—Claude Neely, Harold Clary, Garnie Duke, Paul Copeland, Van Camp Sea Food; John Dassow, U. S. Fish & Wildlife, Robt. Hiltz, Vince Evich, Calder Bennett, South Coast Fisheries, Inc.; Charles R. Carry, C.F.C.A.

Don. K. Loker, Star-Kist; Gerald "Red" Cigliano, Pan-Pacific; James S. DeSilva, South Coast Fisheries.





Top Row—

R. M. Diehl, Dave Wilson, J. P. Morgan, E. G. Brockman, Continental Can Co.; Glenn Copeland, William Rule, Bob Beaman and Geo. Courtney, Van Camp Sea Food Co., Inc.

Center Row—

Andrew Mardisich, Franco-Italian Packing Co.; Peter Repovich, Calif. Commercial Fisheries Ass'n; Ted E. Ayres, American Can Co.; W. W. Durney, Griffith-Durney Co.; Max J. Gorby, Jack Dinnerstein, James R. Barry, California Marine Curing & Packing Co.; Charles D. Alhadeff, Whiz Fish Products Co.

Bottom Row—

Walter Gillis, Sr., Van Camp; Robert K. Pedersen, Tony Bezich, Andy Bonacish, Star-Kist Foods, Inc.; G. P. "Tex" Ellington, Phil Bertram, Van Camp Sea Food; Ed Chapman, Pan-Pacific Fisheries; Jack Gorby, California Marine Curing & Packing.

gal, Turkey and Germany were cut and inspected.

A luncheon concluded the affair, with the C.F.C.A. as host and its current present head, Harold Requa, Jr., as chairman. Dr. H. Ollcott, University of California, and an associate of Institute of Marine Resources, was featured speaker. His subject covered services the institute can render to canneries to improve quality techniques.

Dr. Lassen, speaking for his committee, said that while the overall quality of the cutting from all samples was good in all tuna styles, the committee was impressed by the Skipjack pack from all canneries submitting sample.

The chairman stated the quality of the Skipjack pack was "notably improved" over previous inspections. The industry should take considerable satisfaction from this, he said, because of the growing importance of Skipjack in the overall annual tonnage.

Purpose of these cuttings is not to find out which company packs the best, but to make personnel in all levels of the tuna industry more quality conscious. Particularly it affords personnel directly responsible for the canned product a chance to get to-

gether, observe packs other than their own, and compare notes. Thus, the chairman said, from an educational standpoint, the annual cuttings have a great value.

Robt. H. Johnson Named As Assistant to Suomela

The appointment of Robert H. Johnson, assistant director of the United States Fish and Wildlife Service since 1955, to the position of special assistant to the Commissioner of Fish and Wildlife, has been announced.

A native of Massachusetts, Mr. Johnson was prominent in New England conservation circles and from 1948 to 1955 was director of the Division of Fisheries and Game of the State of Massachusetts. As assistant director of Fish and Wildlife Service, he was in charge of the wildlife program.

In his new post, Mr. Johnson will serve as the immediate and personal assistant to Commissioner Arnie J. Suomela in all matters pertaining to fish and wildlife. He will be vitally

Also submitted for educational value were the foreign importations, these including canned clams, herring, fish sausage, lobster tails and a number of canned tuna samples.

concerned with problems of both the Bureau of Commercial Fisheries and the Bureau of Sport Fisheries and Wildlife in connection with the Commissioner's supervision and coordination of those two units which make up the United States Fish and Wildlife Service.

Halibut Cooperative Elects Officers

The 13th annual meeting of the Halibut Producers Cooperative was held in Seattle March 23, with the following trustees being elected: J. T. Smith; Carl J. Sather; Sam Hansen; and Hans Warne. At the board meeting of this group held March 27, officers named were: John Clausen, president; Ray Thomasson, 1st vice president; Olaf Schei, 2nd vice president; Al Schramen, secretary; and Art Theberge, treasurer.

Fresh fish for Phoenix

Today, wherever you are, you can enjoy perch from Nova Scotia, salmon from Puget Sound, shrimp from the Gulf—*whenever you like.*

There's no longer a "season" on fish. Frozen food packaging captures *and holds* fresh-caught flavor . . . delivers it to you, months later, many miles away.

It's a booming business. In 1950, only 42 million pounds of fish and sea food were frozen in packages for home consumption. Four years later the amount more than *doubled* to 89 million pounds. And it's growing bigger every year.

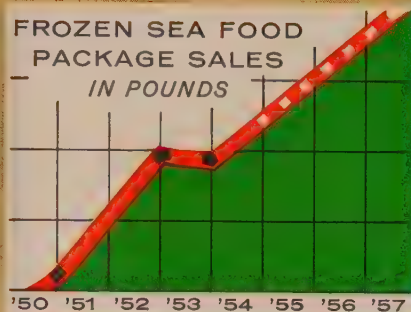
As America's leading supplier of food packaging, Marathon has played a big part in making this growth possible—by developing packages that bring down costs, protect flavor and catch the shoppers' roving eyes.

There are no "seasons" at Marathon, either. Here research and product development never cease in the search for new methods of packaging, new ways of merchandising to wider markets. Marathon leads in food packaging because it *controls and constantly improves* every step in production—from the seedling tree to the printed package.

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The "SAFETY-LISTER"

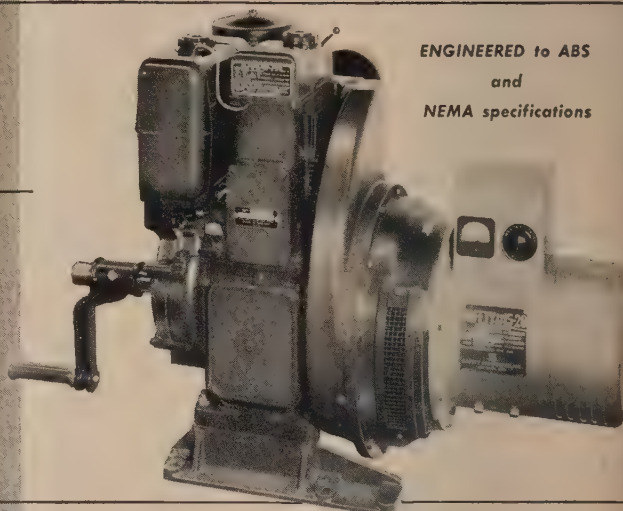
unit incorporates a LISTER-BLACKSTONE type LD-1 air cooled 3½ HP diesel engine, rated at 1800 RPM and a "Safety" direct-connected 35 volt DC generator available in 1500, 1750 and 2000 watt capacities.

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- dynamically balanced armature
- frame mounted control box, complete with ammeter, voltage adjusting rheostat and push button starting relay
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- a one piece handhole cover allowing complete accessibility
- cranking winding available

The "SAFETY-LISTER"

unit, available in other voltages, can be used for farm emergency lighting and for other industrial purposes. Additional information is available upon request.



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especially designed for small boats and pleasure craft. Engine approved by Marine Underwriters for below deck mounting.

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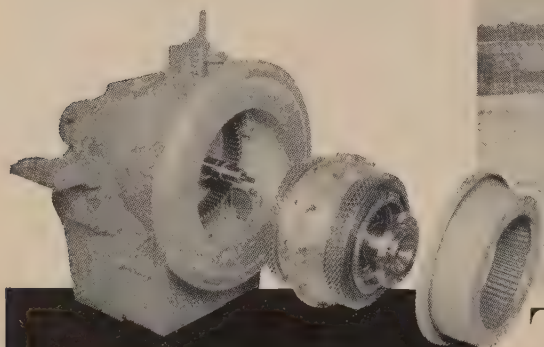
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FOOD FISH MARKETING

Section of PACIFIC FISHERMAN--

*News and Views of National
Trade in Fish and Shellfish*

May, 1957

New England Buys Bristol Bay Properties of Alaska Pacific

Acquisition by New England Fish Co. of the Alaska Pacific Salmon Co.'s operating assets for \$925,000, has been announced by Sydney M. Rosenberg, president and general manager of New England Fish Co., Seattle.

Included in the sale were properties at Pederson Point, Dillingham and Sand Point, Alaska; cannery tenders, power scows, gillnet boats, pile drivers and other floating equipment.

The newly acquired properties will be operated as the Alaska Pacific Division, New England Fish Co., with E. E. Murray as division manager. C. P. Skogmo will be superintendent of the Sand Point operation, with F. L. Daly, Jr., holding a similar post at Pederson Point and Dillingham. O. T. Phanem will be foreman at Pederson Point. All four men previously were with Alaska Pacific Salmon Co.

This consolidation gives New England Fish Company seven operating locations in Alaska, one on Puget Sound and one on the Columbia River. They have not operated previously in the Bristol Bay and Alaska Peninsula areas.

The canneries at Dillingham and Pederson Point will not be operated this year, but their floating equipment will supply fish to joint-operating Bristol Bay canneries. At Dillingham, the pack will be made in the Pacific American Fisheries, Inc., plant, with New England Fish Co., Columbia River Packers Assn., and Pacific American Fisheries participating. At Pederson Point the joint operation will be with Alaska Packers Association, Pacific American Fisheries, Libby, McNeill & Libby, New England Fish Co., Global Fishing Co., and Intercoastal Packing Co.

New England's Sand Point fish will be packed in PAF's cannery at King Cove in a joint operation with Pacific American Fisheries.

In addition to the physical properties, the New England Fish Co. obtained the name and brands established by Alaska Pacific Salmon Co.,

and will take over the Skinner & Eddy Corporation brokers in three areas where New England has not been active—the Jersey Brokerage Co., Newark, New Jersey; Andorn, Bergida & Banks, Inc., New York City; and the Virden Co., Syracuse, N. Y. They will push "Icy Point" reds and pinks and "Suwanee" chums in these markets. In San Francisco, New England will operate through Wyman-Foorman Co., who have been the Skinner & Eddy outlet for 33 years.

Food Brokerage Firm Opens for Business May 1st

Effective May 1, Richard Bentley and W. B. "Bill" Markey formed Bentley-Markey, Inc., a food brokerage firm located at 244 California St., San Francisco, phone: DOuglas 2-2510.

Both men are well known in the Pacific Coast sea food industry. Mr. Bentley was with Berelson, Inc., for 11 years, and Mr. Markey was with that firm for the past two years.

Among the lines they will handle are: Fish King Processors, Inc., Los Angeles—breaded shrimp; Whitney & Co., Seattle—salmon, halibut, and king crab; Grand Caillou Packing Co., Houma, La, Lou-Z-Ana brand cooked and peeled shrimp; Winchester Bay Fish Co., Winchester Bay, Ore.—salmon and crab.

The new firm will also have a line of imported sea food items under the Tropic Sea brand, and will also have a diversified line of domestic sea food.

W. A. Hinckley on Board Of Connell Bros. Company

W. A. Hinckley was made a member of the board of directors of Connell Bros. Company, Ltd., San Francisco canned food exporting company, recently. Mr. Hinckley is also treasurer of that company and a director and secretary-treasurer of Wilbur-Ellis Co., San Francisco fisheries factors. He has been with Wilbur-Ellis Co. for the past 22 years.

California Tuna Report

From 9,840 tons of tuna in March in Southern California came 496,608 cases of tuna and tuna-like fish. Specifically, yellowfin was dominant, 5,568 tons; skipjack, 1,534; bluefin, 7; albacore, 2,709. Yellowtail accounted for 22 tons. These were deliveries to Los Angeles-Long Beach harbors.

San Diego canneries took 3,242 tons of yellowfin, 976 of skipjack and 9 tons of yellowtail, a total of 4,227. The case pack was, approximately, 179,162 cases.

Imports from Japan of yellowfin amounted to 1,199; albacore, 2,694, both approximate figures. South America imports for March were 421 of yellowfin and 875 for skipjack . . . both of which were recorded for Los Angeles harbor.

For February, as usual lightmeat chunk in ½ lbs. lead the California tuna pack. White meat in ½ lbs. ran second in February with a solid pack of 101,906 cases. In conversion to cases of ½s, the California tuna industry packed approximately 656,000 cases of tuna, including solid and standard pack, chunk, grated and flakes, dark and light and tonno; there was also a small case pack of specialty packs.

U.K. to Buy More Salmon From Japan This Year

Canada's Pacific coast salmon and tuna packers aren't worrying too much about it until they receive more details, but the United Kingdom has cleared the way for more purchases of canned salmon in Japan this year.

After five months of negotiation, British and Japanese representatives have completed an agreement whereby trade between the Japan and the sterling area will be increased by \$90,000,000 to \$300,000,000.

Of course, all this won't represent salmon or tuna purchases by any means. Actually it covers artificial pearls, canned peaches, clothing, cameras, tiles, needles and certain chemicals. But the salmon and tuna packers, taking note of the trend last year, expect that Britain will be buying these commodities to a greater extent from Japan this year because of the price differential and the exchange situation.

P.F.'s Recipe-of-the-Month

Rolf Sannes's Fish Loaf

Rolf Sannes, San Pedro, is a transplanted Norwegian who operates the Seaside Supply Stores in partnership with Einar Richter. Besides working with fishermen—in supplying them with netting, etc.—Mr. Sannes likes fish, and with Mrs. Sannes has worked out a most interesting recipe for Fish Loaf, which *Pacific Fisherman* is proud to present. Here it is, and let us know how it turns out when you make it:

SANNES' FISH LOAF

- 3 lbs. Fresh Barracuda (or ling cod)
- ½ tablespoon white flour
- 1 tablespoon salt
- ½ tablespoon potato flour
- ½ teaspoon nutmeg
- 3 cups milk
- 1 cup cream

The fish must be absolutely fresh and clean.

Remove the backbone and scrape meat from the inside of skin, starting from the tail upward, removing any dark parts and all bones. Scrape the meat on a bread-board, so that every speck of bone will be removed.

Place bones and skin in a little water and let simmer, while continuing the preparation.

Grind the fish in a meat grinder—twice with the coarse knife, then twice (or more) with a fine knife. Place in a large mixing bowl and add white flour and potato flour, salt and nutmeg. Knead the mixtures (or pound with a wooden spoon, fork or round mallet) for ten minutes.

Add half-tablespoon at a time of scalded and cooled milk and cream. Knead well each time milk is added and always work in the same direction.

To test the consistency, take one spoonful and let drop on the surface of dough. If it remains on top, it is still too thick and needs more milk; if it sinks halfway down, it is just right; but if it sinks all the way down into the dough, it is too thin. If so, it may be left overnight in the refrigerator and should be just right for baking the following day.

Grease loaf-size baking dishes well

and, when coated and cooled, grease again to be sure the loaf will not stick. Fill dishes only three-quarters full, as mixture swells while baking. Place in a boiling-water bath in the oven (only a few inches of water), and bake in a medium oven for about one hour. Test if baked sufficiently with a toothpick as for cake. If loaf becomes too quickly browned on top, cover with buttered paper. Let it stand in the dish for a few minutes before turning it out on a hot platter.

Serve with a good white cream sauce, with a little curry powder added if desired. Tomato, asparagus or shrimp sauce may also be used, according to taste. When cold, the loaf may be sliced and served fried, with fried potatoes. The fish stock may be strained and used for the sauce or to boil fishballs in. For fishballs, make the dough slightly thinner, and drop them with a spoon into the boiling, salted stock. Or form dough into cakes and fry on both sides over a medium fire.

Barracuda, Mr. Sannes mentions, is caught with gillnets, and is a fish which presents many opportunities for the versatile cook.

REPUTATION

Character is like a tree, and reputation like its shadow. The shadow is what we think of it. The tree is the real thing.

—Abraham Lincoln

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President A. Edward Brown and Secretary Carlos Campbell of the National Cannery Association visited southern California this spring. Seated at head table at the dinner honoring them were, left to right: Homer Howlett, Secretary, Southern California Food Processors Association; Oscar Hayes, President, Cannery League of California; R. C. Tolson, Vice-President, American Can Company; Carlos Campbell, Secretary and A. Edward Brown, President, National Cannery Association.

ciation; H. P. Requa, Jr., President, California Fish Cannery Association; Lou Page, President, Southern California Food Processors Association; Miss Kathryn Smith, Director, Consumer Service Division, National Cannery Association; Carroll Marquard, General Manager, South Pacific District, Continental Can Company; Robert McCracken, Tree-Sweet Products Company; Charles R. Carry, Executive Director, California Fish Cannery Association.

Bombay Visitor Studies U.S. Techniques

Fishermen's cooperative organization and marketing techniques were studied in British Columbia by Naraynarao Koli of Bombay, India. Mr. Koli arrived in Vancouver for a three-week stay on this coast under the extended technical assistance program of the Food and Agricultural Organization of the United States.

He is the managing director of the Bombay State Fishermen's Cooperative Association, and came to British

Columbia to obtain a broader general knowledge of fishery organization and methods and in particular to learn the principles and techniques applied in modern fishery cooperatives with special reference to fish marketing and fishermen's welfare schemes. This knowledge will be applied to the 55 Cooperative Associations in Mr. Koli's native Bombay State.

The Indian visitor spent a week in Vancouver with B. A. Campbell, chief economist, Department of Fisheries. He then went to Prince Rupert for a week with K. Harding of the Prince Rupert Fishermen's Cooperative.

Japanese Export Plan Figures Set For 1957

The Japanese Ministry of Agriculture and Forestry recently published an "Export Plan" on all items of agricultural, forestry and fishery products to be achieved in their fiscal year beginning April 1, 1957. A total of 7,580,000 cases of canned marine products listed was broken as follows: salmon, 1,800,000; crab, 780,000; tuna, 2,950,000; sardines, 700,000; miscellaneous, 1,350,000. An estimated value was set at \$94,740,000. The total figures showed a slight decrease from a similar 1956 plan.

Japanese Salmon Exports To North America Rise

Exports of canned salmon of 1956 packing from Japan to the United States and Canada are now estimated as approximately 700,000 full cases. They were originally expected to be 535,000 cases. The additional exports were subtracted from the original allotment made to countries other than the United States, Canada, and the United Kingdom.

The United Kingdom contracted for only 140,000 cases of Japanese canned salmon from the 1956 pack out of an allotment of 480,000 cases. The decrease is attributed to the fact that negotiations on the renewal of the United Kingdom-Japan Trade Agreement were progressing longer than expected. The United Kingdom was not granting import licenses for Japanese canned salmon pending the completions of the negotiations. Canned salmon figures heavily in this trade agreement.

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"Packed with the Wiggle in its tail"

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Since 1868

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HALIBUT AND SALMON

PORTION CONTROLLED STEAKS

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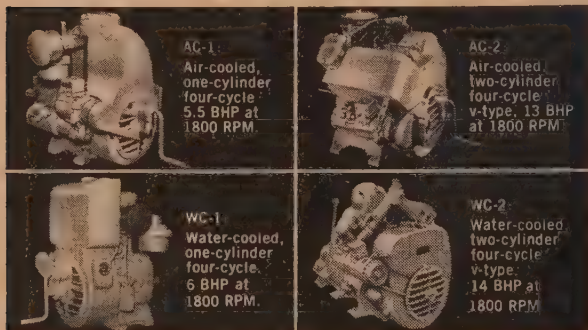


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SOME DESIRABLE SALES TERRITORIES ARE STILL OPEN. INQUIRIES ARE INVITED FROM REPRESENTATIVE DEALERS.

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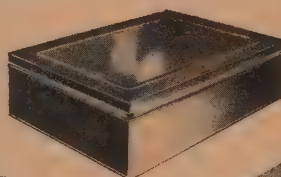
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Lawrence Olssen at the wheel of his new 34' beach seiner.

The "Loretta O"—A New Alaska Beach Seiner

Although his 27-foot Alaska beach seiner was destroyed by fire last fall, Lawrence Olssen of Seldovia, Alaska, was on time for the halibut fishing season this spring with a spanking new and bigger boat powered by a Diesel engine.

The new craft, the 34-foot *Loretta O*, was built last winter by the Commercial Marine Construction Company of Seattle, designed by William Garden. She has a beam of 12 feet,

has an exceptionally shallow draft for a boat of her size and capacity and is powered by an 87 HP Detroit Diesel small-boat engine. She has a payload capacity of 15,000 pounds of iced fish.

A unique feature of the *Loretta O* is the stern tunnel arrangement of the propeller. This gives the craft a draft of only two feet and enables Mr. Olssen to seine extremely close in to shore

when necessary.

The Diesel, which was supplied by the Evans Engine & Equipment Co., Seattle, is located in a small compartment below the pilot house floor, turns a 23" x 18" propeller through 2.5 to 1 reduction gears. The craft cruises at 8.5 knots and at this speed has a cruising range estimated by Mr. Olssen to be 1275 miles.



Seattle Fish Divoteers Hold 19th Annual Spring Golf Tourney

"Come Rain or Come Shine" was the theme song of 134 dauntless Fish Divoteers who braved the elements to play in this organization's 19th annual spring golf tournament at the Rainier Golf & Country Club in Seattle, April 12. Festivities at the "nineteenth hole" and the banquet in the evening were attended by a record-breaking 206 members and guests.

Highlight of the banquet at which Randall Beard, of the New England Fish Co., presided was the distribution of the day's prizes by John McCallum, McCallum-Legaz Fish Co., master of ceremonies.

Low net in the first division went to Charles R. Evans, Evans Engine & Equipment Co. Clare Kidd, National Bank of Commerce, won low gross honors. George McKay, Canadian Fishing Co., Ltd., Vancouver, B. C., and Clare Kidd were awarded permanent cups as winners of low net and low gross in the 1956 fall tourney.

In the second division, Bob Dignon, Northern Products Corporation, carried off the prize for low net. Walter Johnson, Halibut Producers Cooperative, took home the award for low gross. Permanent trophies went to Gale Blasingame, Washington Fish &

Oyster Co., and Mel Halgren, Far-west Fishermen, Anacortes, Wash.

Hank Roemmele, Hilton Seafoods Co., was the low net winner in the third division, with the award for low gross going to Jim Braymer, Whitney & Co. Edward Antonelli, wholesale fish operator, and Larry Carlander, Puget Sound Freight Lines, took home permanent cups as last fall's low net and low gross winners.

Competing in the guest division, Glenn Hinton, Foster & Marshall, and W. J. Gilbert, attorney, Mt. Vernon, Wash.

The tournament was staged under the able direction of Bud Shiel, Walter P. Shiel & Co., assisted by Steve Kipper, Can Go Shippers Assn., Cliff Irvine, P. E. Harris Co., Pat Douglas, Skinner & Eddy Corp., Dick Little, Kelley-Clarke Co. and Edward Verner, Leslie Salt Co.

Prizes for the tourney were lined up by the Sponsors committee, headed by Walt Tobiason, Dehn & Co., assisted by Paul Staley, Seattle Seafoods, Leif Ejde, Vita Food Products Co., Harold Anderson, Tidewater Associated Oil Co., Emmett Murphy, Soo Line Railroad and Tony Trutanich, P. E. Harris Co.

Entertainment was arranged by Pat Kelley, Safeway Stores, chairman, assisted by Bud Moore, Booth Fisheries Corp., and Jack Miller, James Farrell & Co. Handicapping was handled by Jim Braymer, Stan Bear, Whiz Fish Products Co. and Glen Wicker, Green Bay & Western Railroad. In charge of publicity were Carlton Hillyard, Pacific Fisherman and Don Venables, Marine Digest.

Dates for California Salmon Trolling Season

A new law has been passed by the California legislature and signed by Governor Knight setting the California salmon trolling season April 15-Sept. 15.

This is 15 days early on both ends and brings the California opening in line with that of Oregon and Washington. Seasons in Canada and Alaska will probably be the same next year, according to salmon industry observers.

The California season closes earlier than that in Oregon and Washington because California fishermen are said to feel that nothing but immature fish are left by September and there are not much fish anyway. Another reason is that most, if not all California salmon fishermen also fish Albacore, the season for which is usually in full swing by the first of September.

Blunt Warning for Skeena Measures Given Industry

• British Columbia's fishing industry is pondering the possible conservation pattern for the 1957 Skeena River salmon fishery, foreshadowed in recent meetings in Vancouver and Prince Rupert.

At these meetings the Skeena River Management Committee bluntly warned the industry that new and scientifically planned measures must be put into effect in the forthcoming season to continue rehabilitation of the Sockeye run to the system.

Members of the industry were given a detailed account of scientific investigations on the Skeena system by a team of biologists, engineers and economists from the department of Fisheries and the Fisheries Research Board.

Studies in the system were begun in 1955 following establishment of the management committee by Hon. James Sinclair, Minister of Fisheries.

Proposed measures call for a maintenance of fishing boundaries and gear restrictions instituted last year and an extension of weekly closures

to permit escapement of spawners to specific areas of the Babine section of the watershed. An earlier opening date—July 7—is planned.

F. C. Withler, director of investigations for the committee, said the 1957 Sockeye run to the Skeena will be composed largely of two age groups. Four-year olds will be mainly the progeny of the good 1953 escapement to Babine Lake. Five-year-olds will mainly originate from the 1952 slide-blocked escapement. He predicted the combined runs would provide a total stock in 1957 at least as large as average runs of the pre-slide period.

However he pointed out that because of unequal distribution of spawners in existing cycle occurrences full use was not being made of the extensive Babine Lake potential as a nursery area. To make up for losses in other sections, rebuilding of the Sockeye runs on a more uniform basis was now an urgent necessity. Proposed fishing restrictions on the Skeena in 1957 were designed towards this goal.

2,800 Off-Year Pinks Hit Artificial Spawning Area

• British Columbia fisheries biologists have been encouraged by experimental projects at Jones Creek, near Hope, to bring about the off-year spawning of Pink salmon in an area previously barren of fish.

The experiments were carried out by the Fisheries Department and the Fisheries Research Board of Canada in co-operation with the B.C. Electric Co., which was particularly interested because of its proposed participation in hydro-electric development on the Fraser and other rivers with important salmon resources.

At a cost of \$65,000 an artificial 1400-yard channel and spawning area 14 feet wide were built on the creek, a tributary of the Fraser. Gravel was deposited to simulate conditions on other areas that have been favored by spawning Pinks, Chums and Cohoes.

In 1954 about 2,700,000 eyed Pink salmon were flown from the Skeena system to Jones Creek, where they were deposited in the new channel. Survival of 1,100,000 was counted.

This Summer, however, saw the payoff when 2500 Pinks entered and spawned in the artificial area, and 300 outside the area, indicating that the Pinks had returned in an off-year to the spawning place that had been artificially created for them.

Biologists are hopeful that a pattern may be developed for the restocking of several areas along the Fraser so that the river's total run of Pinks may be doubled.

Rich Tuna Area Found Off Coast of Brazil

The Japanese survey ship *Toku Maru*, which departed from Japan in October to survey the fisheries resources of the coast of Brazil, is reported to have discovered rich fishing grounds at 22° S. lat. and 18° W. long. (about 1,300 miles east of Brazil). Tuna, marlin, and other species were reported to have been found in large numbers.

The *Toku Maru* is scheduled to continue surveying the areas off the

coasts of South and Central America and if results are favorable the Japanese Fisheries Agency is hopeful that joint fishing arrangements can be worked out with Brazil, Argentina, Chile, Dominican Republic, and Mexico. Recently, however, Mexico rejected a request to send Japanese fishing vessels into Mexican territorial waters.

Japanese fishing firms during the past several months have entered into joint fishing ventures with foreign firms in Burma, Ceylon, India, Vietnam, Philippines, Brazil, China, and other countries. The Japanese Fisheries Agency has encouraged Japanese firms to seek new fishing grounds and has sent survey ships to Southeast Asia and South America to explore fishing possibilities.

Desmond Named Director F. E. Booth Co., Inc.

A. L. Desmond, for many years general sales manager, F. E. Booth Co., Inc., San Francisco, and Long Beach fish canning firm, has been elected to the board of directors of the company. Mr. Desmond is also a vice-president of F. E. Booth Co., Inc.

Concrete "Peralta's" Hull And Plant to Be Sold

The sardine reduction equipment in the concrete ship *Peralta* anchored at Antioch, Calif., where it has been for the past 10 years, is now being removed from the concrete hull and will be sold through James R. Townsend, San Francisco fisheries consultant.

The machinery, which has been kept intact, and the ship are owned by Elwyn C. Hale Fisheries, Mrs. Mabel E. Hale, and Elwyn C. Hale. Both Mrs. Hale and her son Elwyn are well known in the Pacific Coast fishing industry.

There are two reduction plants involved—one is on the deck of the vessel, and is an Enterprise unit of 10 tons per hour capacity, and has never been used. The other reduction plant, in the hold of the vessel is a Hiller with a capacity of 20 tons per hour and was used for a number of years at Pt. San Pablo.

It is understood that the hull of the *Peralta* will be sold separately.

We Regret Our Error

In a picture caption in the April issue of *PACIFIC FISHERMAN*, the wrong address was given for Commercial Engine Supply Company, 470 Bayshore Boulevard, San Francisco. This is a new company that has been formed to distribute Allis-Chalmers marine diesel engines and diesel generator sets in Northern California.

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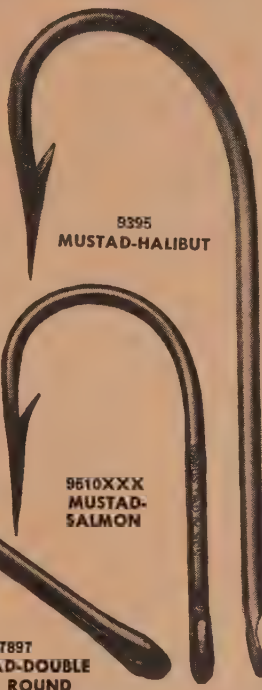
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1956 Pink Salmon Escapement Greater Than in Parent Year

● Stream surveys were conducted by the Fisheries Research Institute in Southeastern Alaska during 1956 with the objective of continuing the system of observation of Pink salmon escapement in the key streams that have been under observation by the Fisheries Research Institute since 1949. The system is limited to a basic distribution of Pink salmon streams throughout Southeastern Alaska that can be adequately surveyed periodically and satisfactorily by current methods. The distribution is designed to approximate a cross-sectional sample of the productive salmon areas in Southeastern Alaska. The system is based on measuring the *relative abundance* of the escapements and is *not a measure of the total numbers* of the escapement.

From 1949 to 1953 the stream surveys were conducted from chartered vessels transporting the stream surveyors in each district to the streams for foot or river skiff surveys. In 1954 most of the streams were surveyed from the air, with only a few streams being surveyed on the ground. In 1955 and 1956 all streams were surveyed from the air by one man.

A stream-survey program based on air transportation is fast and economical. The methods of observation employed are designed to compensate as much as possible for limitations of aerial enumeration. Detailed maps and descriptions of all regularly surveyed streams were used by the observer. The greatest possible degree of comparability of surveys from year to year by present methods is attained by employment of the same observer. Air surveys were made over the standard survey distances and correspond to the surveys in previous years.

The success of the aerial surveys is entirely dependent upon the weather. In 1956 a 12-day period of very poor flying weather occurred in the middle of August and caused a minor gap in continuity of early stream surveys. Any more prolonged periods of poor flying weather or their occurrence during peak periods could seriously impair the continuity of these surveys.

● The escapement of Pink salmon in 1956 was greater than the parent escapement in 1954. A few streams

By
John W. Martin

which were exceptions were either at an extremely low level of abundance in the parent escapement or at a level of abundance where enumeration error may have exceeded actual numerical differences.

The odd-year middle and late runs in 1955 illustrated the resilience of the Pink salmon. In these same streams a similar situation was observed in 1956. The depressed even-year middle runs in the Northern Division had the best escapements that have been observed by the Fisheries Research Institute since 1949. Hoonah Sound was outstanding in the magnitude of the return noted. Two interesting features of these escapements were the unusual lateness of the runs and the high percentage of intertidal-zone spawning.

The Southern Division also had increases in the relative abundance of the escapements, especially in the middle and late-run streams. A number of streams had outstanding numbers of Pink salmon, although Anan and Portage Cove creeks were the only early-run streams where escapements were greater than those observed in 1949. Escapements ten to twenty times greater than in the parent year were numerous.

● The most significant observation made was the relationship between the excellent escapements of Anan Creek and the late streams throughout Clarence Strait in 1956 with the seaward-migrant observations made in 1955. In regard to the Bradfield Canal-Earliest Sound area, Howard Smith of the Fisheries Research Institute noted on May 21, 1955: "... there is little doubt that we must predict the greatest return we have seen." Anan Creek had the largest escapement that has been recorded by the Fisheries Research Institute since our first surveys in 1949. Trap owners reported large numbers of small migrant Pink salmon in the Clarence Strait traps during the fishing season in 1955. The ex-

cellent escapements in the late streams throughout Clarence Strait in 1956 were the return from those migrants.

The Fisheries Research Institute seaward migrant program is experimenting in Smeaton Bay with methods of estimating seaward migrants. In 1956 a trap was successfully operated, capturing over 5000 a day at the peak until the abundance along the shore declined. In 1957 improved trapping methods and equipment will be available. Tests of these traps to measure the relative abundance of the seaward migrants passing through the area will be conducted. Initial studies of the relationship of the salt-water conditions to the survival and growth of the migrants are promising and should be continued with the improved methods now available.

Spawning Areas Damaged By Gravel Removal

Commercial and sport fishermen have expressed concern over the unrestricted removal of gravel from streams in various parts of coastal British Columbia.

A. J. Whitmore, chief supervisor of fisheries, says that recent removals of gravel from the Chemainus river on a large scale for industrial and other uses has damaged the spawning beds and resulted in losses of eggs and fry of Chum and Coho salmon. This stream, he said, is an important producer both for commercial and sport fisheries.

Mr. Whitmore pointed out that gravel is generally obtainable in practically unlimited quantities in areas where its removal would not affect salmon spawning. He added that prosecutions could result from wilful damage to spawning beds by removal of gravel or other causes and that the question of court action in the Chemainus case is presently under consideration.

Graham Barbey Heads Astoria Planning Group

Graham Barbey, president of the Barbey Packing Corporation, Astoria, in March was appointed chairman of the Astoria Planning Commission, to serve a four-year term.

Mr. Martin is Fisheries Research Institute project leader for the Southeast Alaska stream survey and escapement index studies.

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New 38-Foot Steel Seiner Built for Versatility

Latest development in fishing craft is a 38-foot steel seiner nearing completion at the Marine Construction & Design Co.'s yard in Seattle. The wide beam, V-bottom and tunnel stern construction make her readily adaptable for offshore trolling, gill netting and crabbing.

The boat will be powered with a 120-hp. JT 600 Cummins 6-cyl. diesel with 2 to 1 reduction gears, turning a 22" x 20" Olympic bronze high "F" wide blade propeller.

For the hull—said to have greater capacity than wooden boats this size—Marco has used U. S. Steel's corrosion-resistant, high tensile Corten steel. Her deckhouse, built on a three-inch steel coaming, will be welded to the deck to assure a completely watertight connection. To reduce electrolytic action, the shaft is two-inch stainless steel turning in Goodrich Cutless rubber bearings.

The deckhouse is constructed of Super Hardbord. Fibreglas coated with resin covers the roof. Dual controls are mounted inside the pilot house and on the flying bridge.

Marco is fitting the boat out as a

four-man seiner for Louis Bassanich of Seattle. To handle web, she will use an 18-inch Puretic powerblock and Marco hydraulic purse winch.

Cost, says the builder, compares favorably with that for wooden boats of the same size. Accordingly, Marco is preparing for additional orders in the fall when heavy repair yard work will be finished. At that time construction of these boats will be put on a production basis, thereby reducing costs still further.

Gold Medal Awarded Dr. H. L. A. Tarr

One of the two 1957 gold medals of the Professional Institute of the Public Service of Canada has been awarded to Dr. H. L. A. Tarr, North Vancouver, B. C., director of the Fisheries Experimental Station in Vancouver.

Dr. Tarr has gained wide recognition during the past two years for his outstanding work in the field of antibiotics for the preservation of fish. He has been studying micro-organisms and was cited by the Institute for "contributions to pure and allied science."

Ocean Shrimp Fishery A Growing Industry

California's ocean shrimp industry, off to a slow start five years ago, at last looks like it was here to stay.

The catch in 1952, the first year commercial permits were issued, totaled 206,000-lbs., and has slowly climbed to a catch of 1,150,000-lbs. in 1956. As fisheries go, this one is an infant for there were only eight boats, employing 25 fishermen, active in 1956. Another 350 persons on shore derived income from processing the product, most of it going into vacuum packed cans or frozen food packages.

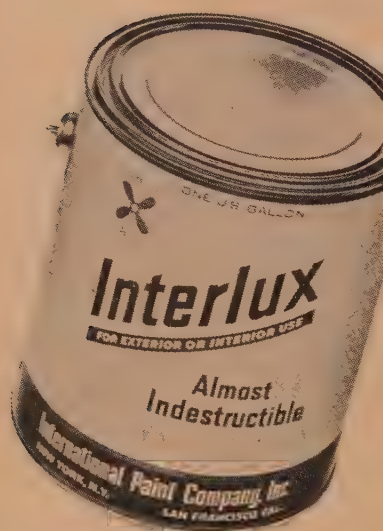
The catch was landed for the most part in Bodega Bay and at Crescent City.

The season opens May 1, on a permit, and quota basis, for northern California from Pigeon Point to the Oregon line, and closes Oct. 15.

Actually the shrimp in question is a small prawn but it is termed "ocean shrimp" to distinguish it from the smaller "bay shrimp" of San Francisco Bay. The latter is a true shrimp. The prawn harvested off Crescent City and Bodega Bay is known scientifically as *pandalus jordani* and in other circles is also called pink shrimp or cocktail shrimp.

The ocean shrimp usually taken for the market is 3/4" long, with less than half of this being edible.

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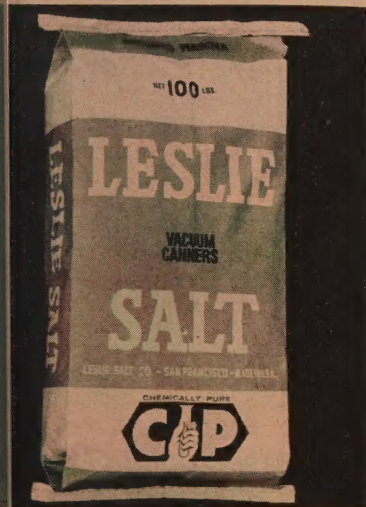
Type-acceptance by the Federal Communications Commission of the complete current line of RCA "Radiomarine" two-three megacycle radiotelephone equipment for ship-to-shore communications is announced in March by George P. Bridgman, Manager, "Radiomarine" Sales, RCA Communications Products Department.

FCC type-acceptance, said Mr. Aldridge, assures the boat owner that his RCA equipment meets the latest requirements for both small craft and commercial vessels. Important features such as power line, modulation control, spurious emission, frequency stability and other characteristics are considered by FCC before type-acceptance is granted.

Mr. Aldridge pointed out that the new C type-acceptances now enable RCA to offer a complete line of type-accepted radiotelephones for both low-band and high-band operation.

Slie Salt Introduces Vacuum Salt 99.98% Pure

A revolutionary new vacuum salt an-
ing 99.98% plus pure is now being
tributed by the Leslie Salt Co. it was



announced recently. The new grade, designated CP (Chemically Pure) is the best salt commercially available. In fact, analyses show it to exceed all known commercial standards for chemically pure salt, both private and governmental.

According to a spokesman for Leslie, the new CP grade will bring an entirely new standard of salt purity to the canning industry. Leslie's technical staff is available for consultation to show you the benefits of CP salt in your operation. Inquiries should be directed to Leslie Salt Co., 505 Beach St., San Francisco.

Herman C. Nimmer
and Norseman Marine

Officials of Norseman Marine have announced that Herman C. Nimmer has joined the company as purchasing agent and production supervisor.

his duties with the company, in addition to purchasing agent, will include scheduling and control of the production of the complete line of Nordberg Gasoline Marine Engines as manufactured by Norse-Marine of Oshkosh, Wisconsin.

Continental Can Company Makes New Appointments

Warren F. Schreiber has been appointed technical assistant to the general manager of the Cannery Equipment Service Department, Continental Can Company. Mr. Schreiber was formerly section chief of End Seam Forming at Continental's Metal Research & Development Department.

David L. Guthrie, formerly Continental's plant engineer at St. Louis, will assume the position of staff engineer for Cannery Equipment Service.



Clyde C. Smith will oversee Universal wholesale marine sales.

Universal Motor Company Names Vice President

The appointment of Clyde C. Smith as Vice President of the Universal Motor Company has been announced by Mr. Ralph G. Klieforth, President of Universal. In this new capacity, Mr. Smith will have charge of Universal wholesale marine engine sales and will work closely with Universal distributors and dealers throughout the country. Mr. Smith has had many years of diversified experience in the marine engine field.

**Thomas A. Short Co. Dealer
For Ford-Parsons Engines**

Thomas A. Short Co., San Francisco, has been appointed exclusive northern California dealer for the Ford-Parsons marine diesel engine, which is distributed in California by Tractor-Equipment Distributors, Inc., Los Angeles.

The engine is a product of the Ford Motor Co. and is a compact, 4 cycle, light-weight diesel engine, developing 52 continuous bhp @ 2250 rpm.

New Columbian Bronze Dist. Outlet

The Columbian Bronze Corp., Freeport, N. Y., has appointed the J. B. Hickman Company of Seattle as its representative for Columbian bronze propellers and marine accessories. The Hickman Company is located in the Maritime Building.

De Laval Machine Described in Booklet

Bulletin No. NC-104 issued by the De Laval Separator Company, Poughkeepsie, N. Y., has just been issued. It describes the De Laval Model AC-VO Nozzle-Matic Centrifuge which is used in the processing of fish oils and fish press liquors. Copies may be obtained by writing to the company.



Robert A. Turner, assistant to West Coast Manager of Sales, American Can Company.

Canco Advances Robert Turner

Robert A. Turner, former sales representative for the American Can Company in Southern California, has been named assistant to the West Coast manager of sales, with headquarters in San Francisco.

Announcement of Turner's promotion was made by Alexander Black, Canco's Pacific Division sales manager.

In his new post, Mr. Turner will assist the West Coast sales organization in a supervisory capacity, handling operational assignments. He will make his headquarters at Canco's Pacific Division office, 111 Sutter Street, San Francisco.

In-Mar Co. Adds Mercedes-Benz Diesels

In-Mar Co. of Wilmington, California, has announced the complete line of Mercedes-Benz marine diesels as a new addition. These engines are now on display at the In-Mar showroom, 607 W. "B" Street in Wilmington.

Mercedes-Benz diesel engines operate on a four-stroke principle, with the famous Daimler-Benz pre-chamber combustion system. They range from 19 to 3,000 horsepower.

Literature and technical information on the Mercedes-Benz diesel and Nordberg engine lines may be obtained without charge at the new showrooms.

New Agent For Laminar X-500

C. H. Hendry Company is now handling Laminar X-500, a Polyurethane coating recommended for use on wood and polyester glass laminates. This product, manufactured by Magna Coatings and Chemical Corporation of Los Angeles, also has applications for ferrous and non-ferrous metals.

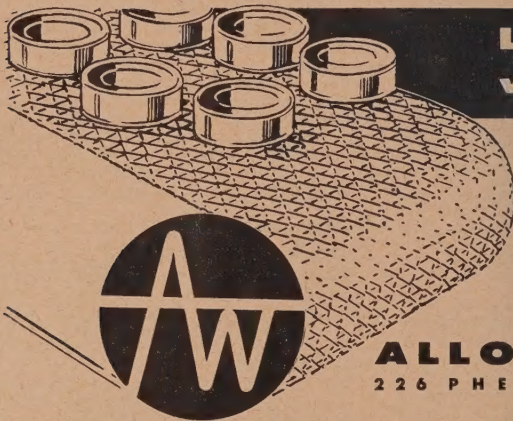
New GM Brochure

General Motors' new and improved Hydrotor starter, which provides instant starts for Diesel engines while eliminating the maintenance costs of batteries, cables, magnetos, air compressors, etc., is fully described in a new brochure just issued by GM's Detroit Diesel Engine Division. Copies may be obtained from Detroit Diesel distributors and dealers or by writing the Division, 13400 W. Outer Drive, Detroit 28, Michigan.

Consolidated Fisheries, Inc., San Francisco, is transferring the "Cat" engine out of their burned trawler **Lincoln** into the hull of their trawler **Crescent No. 2** at the yards of Associated Dredging Co., Sausalito. The hull of the **Lincoln** and the engine from the **Crescent No. 2** will be junked. Skipper of the **Crescent No. 2** will be John Lampi, formerly of the **Lincoln**.

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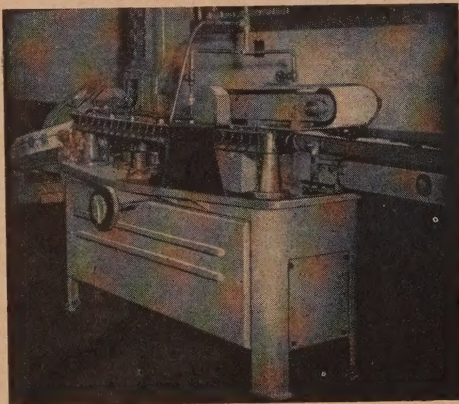


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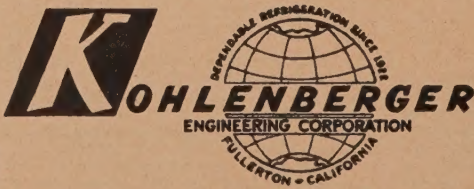
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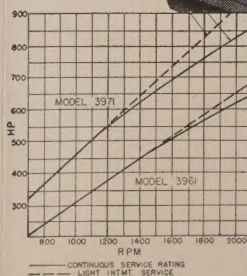
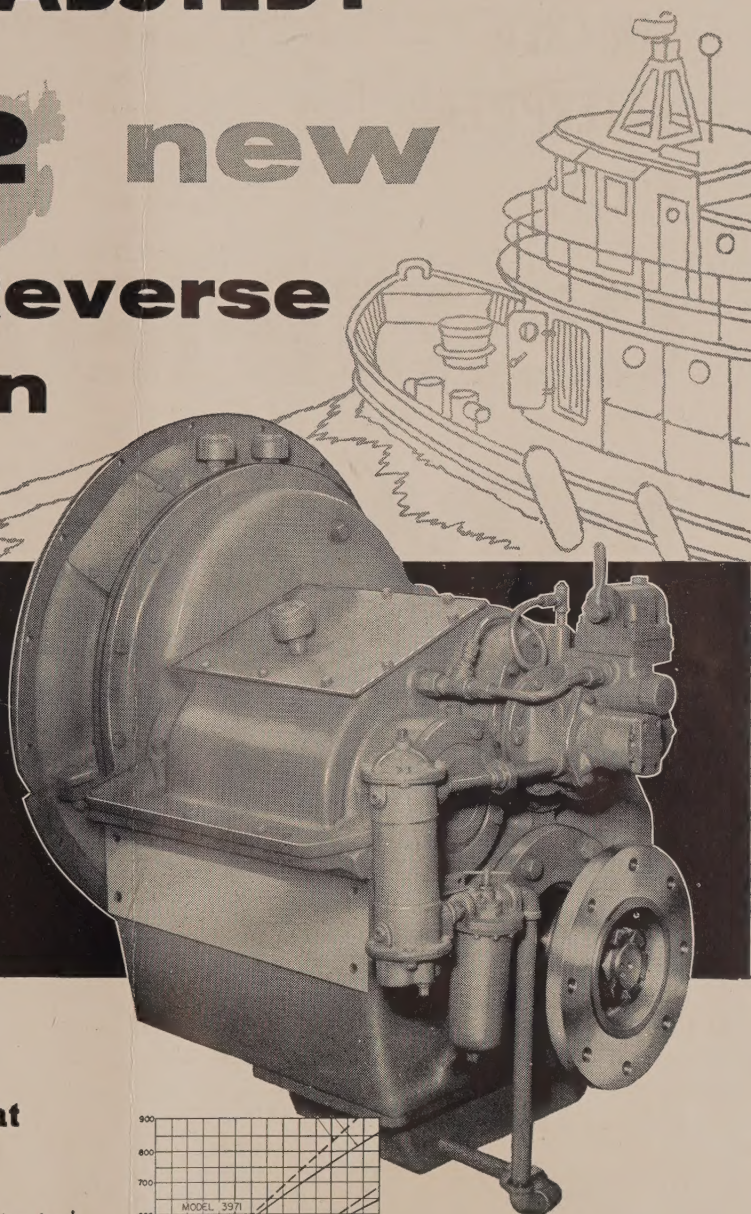
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This is to certify that the Diesel Engine herein described has been engineered, manufactured and tested in accordance with rigid Caterpillar Standards. The materials and workmanship incorporated into this engine give it the inherent capacity for satisfactory performance when applied in accordance with the power ratings established and recommended by this company. The **MAXIMUM OUTPUT** capacity of this standard production engine is **200 H.P. @ 2000 R.P.M.** equipped with: air cleaner, water pump, lubricating oil pump, fuel pump, and standard intake and exhaust manifolds.

I certify that R. L. Henson, Supervisor of Diesel Engine Test, Caterpillar Tractor Co., has tested this Certification and I affix my signature and the date of test.

R. L. Henson
Supervisor Diesel Engine Test
Caterpillar Tractor Co.
Peoria, Illinois

Exp. 11/30/58

Caterpillar Model D326 Industrial was manufactured and shipped as follows: Engine Serial No. 39B1018 Shipping Date February 11, 1957

Power Setting 152 H.P. @ 1600 R.P.M. Intermittent Power Rating

Attachments	<u>Radiator & Fan</u>	<u>Tachometer Drive</u>
	<u>Ether Starting Aid</u>	<u>Muffler</u>
	<u>32V Charging Generator</u>	<u>Heater Connections</u>
	<u>Governor Control</u>	<u>Remote Shut-off</u>

POWER RATINGS

MAXIMUM OUTPUT is the horsepower capacity of the engine, a measure of the maximum power, $\pm 5\%$, that can be developed for five minutes without drop in speed.

INTERMITTENT HORSEPOWER is a rating for use in variable load applications such as excavators, hoists, and standby power units, where the duration of sustained full power output is one hour or less, with the average output not over 80% of Intermittent Horsepower.

RATED HORSEPOWER is a rating for use in applications such as planing mills, hammer mills, and rock crushers where the duration of sustained full power output is 12 hours or less.

CONTINUOUS HORSEPOWER is a rating for use in applications such as work boats and pumps where the duration of sustained full power output is 24 hours per day, day in—day out.

Horsepower figures are established in accordance with rigid Caterpillar standards. All ratings, corrected to sea level barometric pressure (29.92 in. Hg.) and standard temperature (60°F), apply to a production engine including air cleaner, water pump, lubricating oil pump, fuel pump and standard intake and exhaust manifolds. The above ratings are based on British and American BHP.

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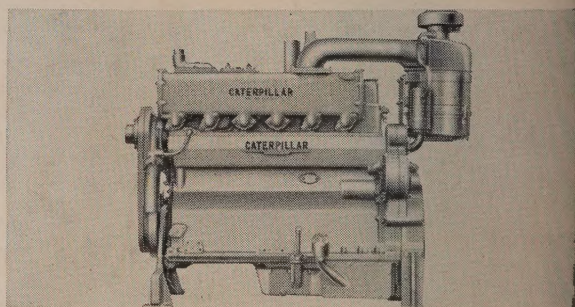
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